

**Syntactic Change in the Verbal System of Bumthang,
a Tibeto-Burman Language of Bhutan**

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ABSTRACT

This thesis investigates the synchronic and diachronic relationship of the verbal suffix *-na* to the copula *na* in Bumthang, a Tibeto-Burman language of central Bhutan. I discuss the formal and functional properties of each to demonstrate that the suffix *-na* originates in the structural reanalysis of the copula *na*.

Previous research has shown how copulas in Tibeto-Burman languages may come to differentially mark personal knowledge. This differential pattern has been termed ‘personal versus impersonal,’ ‘conjunct versus disjunct,’ and ‘egophoric versus non-egophoric,’ among other labels. In the case of Bumthang I show that as *-na* has been drawn into the verbal paradigm, it has brought with it the dimension of differential personal versus impersonal marking to a system that did not previously make that distinction. This has led to significant changes in the structure of the verbal paradigm.

It is hoped that this thesis will contribute to an understanding of how personal versus impersonal splits may develop, and be reinforced by other paradigms in the language. This thesis also aims to contribute to the documentation of Bumthang.

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Any errors or deficiencies in this thesis are of course my sole responsibility, and cannot be attributed to any of the people above.

GLOSSING CONVENTIONS

Glossed examples will be given throughout the thesis, as in (1):

- (1) *Wii zhra zuspigé?*
 wi=i zhra zu-s-pa=é=gé
 2SG=ERG what eat-PFV.PRS-NMLZ=GEN=Q
 ‘What did you eat?’
 (KJZ1-NOTES-MD2013:35)

In these examples, the first line represents the utterance as it would be spoken, while the second and third lines are morphemic glosses. Where possible, these glosses have been based on the Leipzig Glossing Rules (n..). The fourth line is a free translation. The fifth line references the location at which this example can be found in the collected data.

Two symbols are also used to indicate unacceptable examples. The asterisk * indicates that the utterance is ungrammatical. The question mark ? indicates that the utterance is infelicitous or in some way not preferable.

Finally, some examples have been altered in order to better align the sentence in question with another example. Alterations have been restricted to nominal arguments and kept to a minimum. Moreover, in these cases the reference will locate where an analogous structure can be found in the collected data.

ORTHOGRAPHY

A Roman orthography has been developed for Bumthang based conventions employed in the Roman orthographies of other languages of Bhutan. This orthography is used throughout the thesis. The orthography does not directly reflect the underlying phonology in that tone is not usually marked. Notes on the phonology can be found in Appendix A.

Roman Consonant Orthography for Bumthang

	Bilabial	Dental	Alveolar	AlveoP	Velar	Glottal
Voiced	b	d	dz	j	g	
Unvoiced	p	t	ts	c	k	
Aspirated	ph	th	tsh	ch	kh	
Nasal	m		n	ny	ng	
Fricative	f		s~z	sh~zh		
Trill			r			
Lateral			l lh			
Approximant				y	w	h

Roman Vowel Orthography for Bumthang

	Front	Back
High	i	u
Mid-High	é	ó
Mid-Low	e	o
Low	a	

ABBREVIATIONS

1,2,3	first, second, third person	LOC	locative case
A	adjective	N	noun
–	bivalent subject	NMLZ	nominaliser
ABL	ablative case	NON-EGO	non-egophoric marker
ABS	absolutive case	PFV	perfective aspect
ALL	allative case	PL	plural number
COP	copular verb	P	preposition
COT	cotemporal subordinator	–	bivalent object
DIST	distal demonstrative	PRO	pronoun
EGO	egophoric marker	PROX	proximal demonstrative
EMPH	emphatic	PRS	personal marker
ERG	ergative case	Q	question marker
FRST	firsthand evidentiality	RES	resultative aspect
GEN	genitive case	S	monovalent subject
HEAR	hearsay evidentiality	SEQ	sequential subordinator
I	inflection	SG	singular number
INDF	indefinite	SOV	subject-object-verb
IPFV	imperfective aspect	TMA	tense-mood-aspect
IPRS	impersonal marker	V	verb
IRR	irrealis mood	XP	constituent phrase

I. PRELIMINARIES

1. Introduction

This thesis will explore syntactic change in the verbal system of Bumthang, a language of central Bhutan. Specifically, it will look at the relation between the verbal suffix *-na* and the copula *na*, to argue that the suffix developed out of the (still existing) copula.

Copulas and suffixes in Himalayan languages often express meanings relating to the personal knowledge and experience of the speaker or addressee. This category of meaning has been variously called *personal marking* or *egophoricity*. With respect to Bumthang, this thesis will argue that just as the suffix *-na* developed out of the copula *na*, the category of personal marking in the suffix developed out of the category of evidentiality in the copulas.

This chapter will introduce the language, the data, and the focus of the thesis.

1.1 will discuss Bumthang in the context of Bhutan. 1.2 will review the data sources for the thesis, while 1.3 will review past and concurrent projects based on this data. Finally, 1.4 will outline the focus of the thesis, while 1.5 will outline its structure.

1.1. Background

Bumthang is a language of central Bhutan. It is predominantly spoken in the four valleys of Bumthang District: Chokhor in the north, Tang in the east, Chumey in the southwest, and Ura in the southeast. Each of these valleys roughly coincides with a different dialect of the language (van Driem 1995:1). The language is also spoken, more divergently, in Trongsa District, to the west of Chumey.

There is spill over between Bumthang as spoken in these four valleys, and neighbouring languages. These include Khengkha, which is spoken in Zhemgang District to the south, Kurtöp, which is spoken in Lhuntse District to the east, and Nupbi, which is spoken in Trongsa District to the west. These languages tend to be grouped together. Van Driem (1995:1) for instance states that “it is linguistically defensible to consider Bumthang, Kheng, and Kurtöp as three distinct dialect groups of a single Greater Bumthang Language.” However, Donohue (2015:n.p.) observes that in light of the dialectal diversity found in these languages, “it appears likely that this region contains much more underlying linguistic diversity than has been reported and presented.”

Beyond this grouping, Bumthang has been placed in the East Bodish branch of the Tibeto-Burman language family. This links it with several other languages of the region, including Chali, Dakpa, Dzala, and Kurtöp in the east, and

Khengkha, Nupbi, and Ole in the south. However, Hyslop (2013:94-95) observes that in the absence of more detailed data on these languages,

it is impossible to tell whether the East Bodish languages represent a family of languages that have descended from a shared ancestor, or whether they represent languages of an unknown substrate which were relexified by an Old Bodish parent.

1.2. Data Sources

This thesis is based on data from the Ura dialect which was collected between 2013 and 2016 under the supervision of Dr. Mark Donohue. The 2013 data was collected as part of a field methods course run at the Australian National University (ANU). Some of the 2014 data was collected in Bumthang District by Donohue, and some in Kathmandu (Nepal). Finally, the 2015 and 2016 data was collected as part of a second set of field methods courses run at the ANU. The majority of the data comes from these later years, and consists of recordings, field notes, and transcribed texts.

For the data collection that took place at the ANU in 2013, 2015, and 2016, we had the assistance of Dorji Wangchuk, who was raised in Ura. Wangchuk is university educated, and as well as Bumthang also speaks Dzongkha (the official language of Bhutan), English, and Nepali among others. Our reliance on a single speaker from a single region is a noted weak point of this collection, but it is mitigated by the 2014 recordings of other speakers from Bhutan and

Nepal. The collected can also be compared with that in van Driem (1995) for further reference.

The recordings contain textual and elicitation data. The textual data consists of traditional stories, descriptions of daily life in Ura, recipes, jokes, and personal narratives. The elicitation data traces our exploration of different aspects of the language, including its phonology, nominal and verbal structures, semantics, and pragmatics. This also includes elicitation which made use of Dahl's (1985) tense, mood, and aspect questionnaire, and Haspelmath's (1993) list of inchoative/causative verb pairs.

To support the documentation of Bumthang, data collected in Canberra is being prepared for archiving with the Pacific and Regional Archive for Digital Sources in Endangered Cultures (PARADISEC). In doing this we aim to make the collected data more accessible and transparent.

1.3. Related Projects

The collected data informs several other projects. The first is Donohue and Donohue (2016), which shows that ergative case marking is affected by several factors relating to word order and nominal and predicate semantics. The second is Donohue and Peck (2016), a conference paper exploring the link between Bumthang and the extinct language Zhang-Zhung. The third is Peck, Donohue, and Wyatt (2016), another conference paper which investigates discrepancies between the affirmative and negative verbal paradigms.

Peck (2017) is an exploration of word classes which argues for the existence of nouns, verbs, and adjectives as separate classes in the language. The notion that adjectives are a separate class will be particularly relevant to later discussions in this thesis.

This data will also inform an in-development sketch grammar of the language, which is being created in order to present a broader view of the phonology, nominal and verbal morphology, and syntactic structures.

1.4. Thesis Focus

This thesis will explore syntactic change in the verbal system of Bumthang. Specifically, it will argue for a route by which the verbal suffix *-na* developed out of the copula *na*. It will further argue for a route by which the category of personal marking developed out of the category of evidentiality.

The copula *na* and the suffix *-na* are a pair of near-identical forms that occur in the verbal system of Bumthang. Of the two, the copula is used in attributive, locative, existential, and possessive clauses, while the suffix is used in non-embedded clauses. In most cases there is no ambiguity between these uses. However, there do exist cases in which there is ambiguity between the copula and the suffix, as in (1):

- (1) a. *Banggala kam na.*
 banggala kam na
 chilli dry COP
 ‘The chillies are dry.’
 b. *Banggala kamna.*
 banggala kam-na
 chilli dry-PFV.IPRS
 ‘The chillies are dry / dried.’
 (KJZ2-20160616-01)

In these cases the form *kam*, ‘dry,’ alternates between an adjectival use in (1.a) and a verbal use in (1.b). Subsequently, the form *na* alternates between the copula (1.a) and the suffix in (1.b). This thesis will untangle the descriptive issues surrounding this ambiguity.

Moreover, there is evidence to indicate that the perfective personal *-na* and another irrealis personal suffix *-sang* have only more recently been integrated into the verbal paradigm. In the first case, neither *-na* nor *-sang* occur in the negative paradigm, unlike the other unambiguous suffixes. This thesis will argue

that of the two, *-na* originates from the copular system, while *-sang* originates at a later point in time from the clausal nominalisation system.

1.5. Thesis Structure

This thesis will argue that the suffix *-na* developed out of the copula *na*. To do this, it will look first at the routes by which this development occurred, and second at the mechanisms which motivated it.

Section I is concerned with preliminary matters relating to this thesis, theories of syntactic change, and the Bumthang language. Beyond this introductory chapter, Chapter 2 will review the general background to the thesis. This includes the notion of syntactic change in languages, as well as the linguistic context of central Bhutan.

Chapter 3 will move on to an overview of Bumthang itself with respect to the data collected in Canberra. Basic clausal structures will be discussed, as well as aspects of the verbal system. An overview of the phonology is *not* included here, but for the interested reader it is briefly sketched out in Appendix A.

The bulk of argumentation will be found in Section II. Chapter 4 will investigate the verbal paradigm in more detail with respect to the suffix *-na*. It will demonstrate how *-na* operates within intersecting systems of aspect, mode, and

personal marking. From there it will discuss how *-na* and the category of personal marking have *failed* to fully integrate into the paradigm.

Chapter 5 will turn to the copular system, and to the copula *na* in particular. It will discuss the characteristics and usages of copulas in the language. It will then identify two potential routes by which *na* could have been reanalysed as the suffix *-na*. Finally, it will compare the category of evidentiality in the copular system with that of personal marking in the verbal paradigm.

Chapter 6 will turn to these routes, and to the mechanism of reanalysis. For each potential route it will motivate the development of the suffix *-na* from the copula *na*. Following this, it will also motivate the development of the category of personal marking out of evidentiality. This chapter will conclude the thesis with a review of its findings.

2. General Background

The argument that the verbal suffix *-na* developed out of the copula *na* presupposes two notions. First that there is some route which feasibly connects the suffix to the copula, and second that there is some mechanism which enabled the suffix to develop out of the copula. In order to discuss these notions more precisely, this chapter will review the general background to the thesis, and the existing literature on grammaticalisation and syntactic change.

2.1 will review literature on the notions of syntactic change and grammaticalisation, while 2.2 will more closely review mechanisms of change. From here, 2.3 will compare the verbal systems of Bumthang and its neighbours. Finally, 2.4 will conclude the chapter.

2.1. Syntactic Change and Grammaticalisation

The notion that there is some route which connects the suffix *-na* to the copula *na* can be seen as an instance of *grammaticalisation*. In one commonly-cited definition, grammaticalisation is a diachronic process which

consists in the increase of the range of a morpheme advancing from a lexical to a grammatical or from a less grammatical to a more grammatical status, e.g. from a derivative formant to an inflectional one.

(Kuryłowicz 1965:52 [cited from Harris and Campbell 1995:20])

In this definition, grammaticalisation is seen to consist of a weakening in both the form and the meaning of a given word. In this respect, Harris and Campbell

(1995:20) identify several overlapping terms used to describe this process.

These include *semantic bleaching* or *weakening*, *reanalysis*, and *reduction*.

2.1.1. Form Change

Terms like *weakening* and *reduction* relate to the notion that grammaticalisation entails phonological and morphosyntactic changes in form. Hopper and Traugott (2003:5) observe a continuum of *bonding* between forms which ranges from loose (in the case of independent words) to more tight (in the case of affixes). A number of intermediary states lie between these two points.

These include independent grammatical words such as copulas and auxiliaries, and *clitics*, which are described as “halfway between autonomous words and affixes” (Hopper and Traugott 2003:5).

Grammaticalisation then involves a gradual weakening or reduction in the form of a word. This has been thought of as a unidirectional process, such that independent words can be reduced to affixes whereas affixes cannot grow into independent words. However, counter-evidence for the unidirectional hypothesis can be found in Janda (2001), and in relation to Australian languages in Harvey (2003), and Mushin and Simpson (2008).

2.1.2. Meaning Change

Terms like *semantic bleaching* relate to the notion that this reduction in form correlates to a reduction in meaning. In this respect, Hopper and Traugott

Figure 2.1. Cline of Grammaticality
(adapted from Hopper and Traugott 2003:7)

<i>content item</i> > <i>grammatical word</i> > <i>clitic</i> > <i>inflectional affix</i>			
independent		non-independent	
lexical		grammatical	

(2003:4) observe a distinction between *lexical* forms such as *dog*, *chase*, and *big*, and *grammatical* forms such as *and*, *that*, *it*, and *at*. The former contribute the primary meanings of a discourse, while the latter link parts of discourse in order to indicate deixis, to refer back to already-mentioned participants, and to indicate spatial relationships between one thing and another.

Grammaticalisation then involves a gradual “increase in the range of a morpheme” advancing from a lexical to a grammatical status (Kuryłowicz 1965:52 [cited from Harris and Campbell 1995:20]). Moreover, this meaning change is linked to formal change, such that the reduction of a word to an affix also usually involves a reduction of a lexical to a grammatical meaning (or vice-versa).

Hopper and Traugott (2003:6-8) observe that the reduction pathways described recur across the languages of the world. This can be represented by the use of a *cline*, a “metaphor for the empirical observation that cross-linguistically forms tend to undergo the same kinds of changes or have similar sets of relationships, in similar orders” (Hopper and Traugott 2003:6). The *cline of grammaticality* in Figure 2.1 is a representation of a cross-linguistic route of grammaticalisation.

2.1.3. Mechanisms of Change

Finally, the term *reanalysis* refers to a type of change which results from the innovative structural analysis of an utterance. Reanalysis is one of several mechanisms of change which may drive grammaticalisation. These are “processes that occur while language is being used, [and] the processes that create language” (Bybee 2001:190 [cited from Traugott 2011:20]). Several such mechanisms will be discussed in 2.2.

The mechanism of reanalysis drives syntactic changes other than just grammaticalisation. As such, some researchers have attempted to identify mechanisms that are specific to grammaticalisation (as in Heine 2003), or have even proposed that grammaticalisation is itself a mechanism (as in Haspelmath 1998). Harris and Campbell (1995:20) preempt this by arguing that “grammaticalisation can be explained adequately by the other mechanisms of syntactic change.” This view affords grammaticalisation no special status.

2.1.4. Summary

This section has looked at syntactic change through the lens of grammaticalisation. This process entails a change in both the form and meaning of a word from independent to non-independent, and from lexical to grammatical. These routes of change recur across languages and are summarised in Figure 2.1.

2.2. Three Mechanisms of Change

This thesis draws primarily on a theory of syntactic change presented in Harris and Campbell (1995). The authors of this work observe that (then) recent work on syntactic change tended to focus on either change in particular languages, on specific types of change (such as grammaticalisation), or on the implications of particular theories of syntax. In contrast, Harris and Campbell explore change from a cross-linguistic perspective in order to

establish commonalities in changes across languages and [to] determine what mechanisms lie behind them and how they fit into the overall explanation of syntactic changes. (Harris and Campbell 1995:1)

The authors propose that change can be described in terms of three mechanisms of *reanalysis*, *extension*, and *borrowing* (Harris and Campbell 1995:50-51).

2.2.1. Reanalysis

Reanalysis is defined here as a mechanism which changes the underlying structure of a syntactic pattern, but which does not change its surface manifestation (Harris and Campbell 1995:61-63). The underlying structure includes information about constituents, their hierarchical organisation, categorial labels such as *verb* and *noun*, grammatical relations such as *subject* and *object*, and *cohesion*, which relates to “the status of a linguistic sequence as a fully independent word, a clitic, an affix, or an unanalyzable part of a larger unit” (Harris and Campbell 1995:63).

Meanwhile, the surface manifestation involves morphological marking (e.g. of tense and aspect), and word order (Harris and Campbell 1995:51). Reanalysis does not immediately change the surface manifestation, but it is often driven *by* surface ambiguity. An instance of this is in the sentence *visiting relatives can be dangerous*, which can be interpreted to mean either ‘to visit relatives can be dangerous’ or ‘relatives who visit can themselves be dangerous’ (Harris and Campbell 1995:70-71).

This mechanism is relevant to the issues in Bumthang outlined in 1.4, and will be returned to in 6.1.

2.2.2. Extension

Extension changes the surface manifestation of a syntactic pattern, but does not change its underlying structure (Harris and Campbell 1995:97-102). Extension operates by removing conditions that must be fulfilled in order for a syntactic rule to apply. For example, if two conditions (a) and (b) must be fulfilled in order for a certain form to occur, extension operates by removing one or both conditions. This in effect allows for that form to occur more widely.

Reanalysis often introduces new structures into language, while extension “can eliminate exceptions and irregularities by bringing the new analysis into line with the rest of the existing grammar” (Harris and Campbell 1995:97). Reanalysis and extension thus have complementary roles.

2.2.3. Borrowing

Reanalysis and extension are motivated by internal processes in languages. In contrast, borrowing is motivated by an external situation, namely, contact with another language. Hence, borrowing involves the replication of a syntactic pattern through the influence of another language (Harris and Campbell 1995:51).

2.3 will demonstrate structural similarities between Bumthang and its neighbouring language. This indicates that the notion of borrowing is relevant to our understanding of the contact situation in central Bhutan. However, as the thesis is concerned with evaluating language-internal mechanisms of change, this mechanism will not be explored here.

2.2.4. Summary

This section has discussed three mechanisms of syntactic change as defined in Harris and Campbell (1995). The first two are the complementary mechanisms of reanalysis and extension, which respectively change underlying structure and the surface manifestation. The third involves the replication of a syntactic pattern from a contact language. This is an externally motivated mechanism, and so falls outside the scope of the thesis.

2.3. Greater Bumthang

Bumthang has been placed in the East Bodish branch of Tibeto-Burman. It is further placed in a Greater Bumthang group, along with the languages Khengkha and Kurtöp. This grouping suggests that these languages can be productively compared.

Bumthang, Kheng, and Kurtöp are grouped together based on phonological and structural similarities, but also on the basis of their mutual difference from other languages. Van Driem (1992:11-17) identifies approximately eight languages of the “Bumthang Group.” These are: Bumthang, Khengkha, Kurtöp, ‘Nyen, Chali, Dzala, and possibly Nupbi. Of these, Bumthang, Khengkha, and Kurtöp are mutually intelligible. However,

the essential differences between the phonologies of Khengkha and Kurtökha and the phonology of Bumthangkha and the fact that the speakers of these three languages identify strongly with their respective homelands in B^omtha, Kurtö, and Kheng would appear to justify treating them here under separate headings. (van Driem 1992:12)

Nupbi is treated as a dialect of Bumthang, while the remaining three languages are more distinct.

Michailovsky and Mazaudon (1994) discuss Bumthang and Kurtöp in comparison to two other languages. The first, Dakpa, is shown to be related to, but not a part of the Greater Bumthang group. The second is the classical language rep-

resented in Written Tibetan, which is also shown not to be directly related to the Greater Bumthang group.

Hyslop (2013) discusses several East Bodish languages. These are: Bumthang, Chali, Dakpa, Dzala, Kheng, Kurtöp, and Phobjip (a variety of ‘Nyen). Hyslop aims at an internal reconstruction of the East Bodish branch through a cross-comparison between these languages. In the course of this reconstruction, Bumthang, Kheng, and Kurtöp are again closely grouped together, with Chali at the periphery, followed by Dzala and Dakpa.¹

This literature demonstrates that Bumthang, Khengkha, and Kurtöp are languages which are recurrently placed in the Greater Bumthang group. For this reason, each will be discussed in turn in order to note the ways in which they converge and diverge.

2.3.1. Bumthang

The only sustained reference for Bumthang is van Driem (1995), a sketch grammar based on data from the Chokhor, Chumey, Tang, and Ura Valleys. This sketch focuses on the phonology and morphology, but less on syntactic patterns.

1 The connection with Dzala will become relevant in the discussion of personal marking in 4.2, where it and Bumthang share several similarities.

Van Driem organises the verbal paradigm around the categories of aspect and tense. There is a three-way distinction of past, present, and future tenses, plus an imperfective aspect. These are marked on the verb through the use of suffixes. Within the past tense there is a two-way distinction between *experiential* and *inferential* suffixes. The past experiential suffix -s:

expresses an event or action which the speaker has himself experienced or, in the case of [a] question to the second person, which the person addressed is assumed to have personally experienced or observed. (van Driem 1995:24)

The fact that the meaning of -s relates to personal experience, and the fact that it can mark the personal experience of both a speaker and addressee link the notion of *experience* with that of *egophoricity*. This will be discussed in 3.2.3.

Van Driem's data suggests that in Chokhor and Chumey the past inferential suffix is -*na*, while in Tang it is -*simut*, and in Ura it is -*zumut*. The past inferred suffix:

expresses an event or situation which the speaker has not himself experienced, but which he is able to infer transpired on the basis of his observations or knowledge of the results in the present of the inferred past tense event. (van Driem 1995:24).

Our data on Ura differs from that of van Driem in that both the suffixes -*na* and -*zómo* (a suspected analogue of -*zumut*) are present. While -*zómo* has a resultative meaning, the usage of -*na* is more complicated. A discussion of -*zómo* falls outside the scope of the thesis, but -*na* will be discussed at length in Chapter 4.

Van Driem also identifies two copulas *wen* and *na* in Bumthang. *Wen* is used to specify that two “substantives” (entities) refer to the same thing, while *na* is used in locative, existential, and attributive clauses. Each copula has a negative counterpart *min* and *mut* respectively. The Canberra data largely aligns with this description, and is the focus of Chapter 5.

2.3.2. Kurtöp

A key reference for Kurtöp is Hyslop (2011), a complete grammar of the language.² This grammar covers the phonology, morphology, syntax, and semantics of the language. Hyslop (2012), which is a revised analysis of the verbal and copular paradigms.

The verbal paradigm of Kurtöp is similarly organised around the categories of aspect and tense (Hyslop 2011:513). There is a three-way distinction between perfective and imperfective aspect, plus future tense. These are marked on the verb through the use of suffixes. Within the perfective aspect there is a *five-way* distinction of suffixes based on the speaker’s certainty, knowledge, and privileged access regarding an event or situation, and the unexpectedness of the event or situation (Hyslop 2012:49). The suffix *-para* is used when the speaker is uncertain about an event or situation, the suffix *-mu* is used when the speaker is certain, but does not have personal knowledge, the suffix *-pala* is used when the speaker is reporting on behalf of someone else, and the suffix *-shang* is

2 This reference has been superseded by Hyslop (2017). However, at the time of writing I have not had access to this later source. I apologise in advance for any inaccuracies that may result from my use of the earlier source.

used when the speaker has personal and privileged knowledge. Hyslop notes that *-shang* is similar but not identical to an *egophoric* marker. In this respect, *-shang* is similar but not identical to *-s* in Bumthang.

Finally, the suffix *-na* is used when the event or situation is new or unexpected. This links with the notion of *mirativity*, which is the “linguistic marking of an utterance as conveying information which is new or unexpected to the speaker” (DeLancey 2001:371). In this respect however, *-na* is not identical to *-na* in Bumthang.

Hyslop (2012:52-53) also identifies a copular system which is built around the roots *wen* and *nâ*.³ As with Bumthang, the copula *wen* is used in equative clauses, while the copula *nâ* is used in locative, existential, possessive, and attributive clauses. Each copula also has a negative counterpart *min* and *mû* respectively. Unlike Bumthang, the copulas also exhibit a *five-way* contrast which is based on the speaker’s certainty, knowledge, and privileged access regarding an event or situation, and the unexpectedness of the event or situation.

Within this system, the unmarked form *nâ* encodes that the situation is new or unexpected, while the marked form *nawala* encodes that the situation is not unexpected. This is an inversion of the Canberra data on Bumthang, where the

3 Vowel length is contrastive in Kurtöp, and represented in the Roman orthography by a circumflex ^ (Hyslop 2011:246).

unmarked form *na* encodes non-firsthand experience, while the marked form *naksa* encodes firsthand experience. This will be discussed in 5.3.

The formal and functional similarity between the suffix *-na* and the copula *nâ* suggests that one developed out of the other. Hyslop observes this link, but notes that “The precise source of [*-na* and *nâ*] remains unknown, as does the motivation for [an antecedent form] to grammaticalize into perfective aspect and existential contexts” (Hyslop 2012:59).⁴

2.3.3. Khengkha

The only published reference for Khengkha is Yangrom and Arkesteijn (1996), a lesson-book created for aid workers with the Stichting Nederlandse Vrijwilligers (SNV) Development Organisation.⁵ Two observations can be drawn from this work. The first is that within the verbal paradigm there is a two-way split between the past witnessed suffix *-pa* and the past inferred suffix *-na*. This is similar to Bumthang as described in 2.3.1, and less similar to Kurtöp. That said, Yangrom and Arkesteijn do state that *-na* may be followed by another suffix *-bo*, which is used to express surprise.

The second observation is that there are again two copulas *wen* and *na*, which have the same usage as in Bumthang and Kurtöp. There is an alternation be-

4 Hyslop (2012:59n.15) speculates that *-na* is a grammaticalisation from an earlier stative verb **nak* ‘to be at,’ and also notes that this earlier form is “still present as a lexical verb in Bumthap and Khengkha.” I will briefly discuss this in 5.1.3.

5 “Foundation of Netherlands Volunteers.”

tween the unmarked form *na*, which encode personal or integrated knowledge, and the marked form *nakta*, encodes new or “objective” knowledge. This is again similar to Bumthang,⁶ and less similar to Kurtöp.

In addition to this reference, preliminary documentation of Khengkha also occurred in 2016 at the Australian National University. For this documentation we had the assistance of Tashi Kelzang, who was raised in Zhemgang District. Kelzang is university educated, and also speaks Dzongkha and English. The collected data contains the same forms as observed in Yangrom and Arkesteijn (1996).⁷ It also shows that the verbal paradigm of Khengkha differs structurally again from both Bumthang and Kurtöp, even though it shares many of the same forms. Of note is the category of personal marking, which is more fully integrated in Khengkha than in Bumthang. This will be briefly looked at in 4.3.1.

2.3.4. Summary

This section has reviewed the literature on three languages of the Greater Bumthang group: Bumthang, Khengkha, and Kurtöp. While some forms recur in all three languages (as in Table 2.1), for each language these forms are somewhat differently utilised. In terms of just these forms, there is more similarity between Bumthang and Khengkha than between either language and Kurtöp.

6 Another similarity in this respect: *nakta* in Khengkha is comprised of the copula *na* and an imperfective suffix *-ta*, and *naksa* in Bumthang is comprised of the copula *na* and the imperfective suffix *-za*. There is a form *wenta* in Kurtöp (Hyslop 2012:56) which is analogous to *wenza* in Bumthang, but apparently no form *nakta*.

7 One difference is that we analyse the verbal paradigm in terms of aspect and mode rather than tense, such that *-pa* and *-na* are perfective rather than past suffixes.

Table 2.1. Recurrent Forms in Bumthang, Khengkha, and Kurtöp

(note: *existential* is shortened to “exist.”)

	Bumthang	Khengkha	Kurtöp
Verbal	<i>-na</i>	<i>-na</i>	<i>-na</i>
Suffix	past inferred	past inferred	perfective mirative
Unmarked	<i>na</i>	<i>na</i>	<i>nâ</i>
Copula	exist. non-firsthand	old knowledge	exist. mirative
Marked	<i>naksa</i>	<i>nakta</i>	<i>nawera</i>
Copula	exist. firsthand	new knowledge	exist. non-mirative

2.4. Concluding Remarks

This chapter has reviewed the general background to the thesis. This includes literature which relates to grammaticalisation, a process of change in the form and meaning of a word. A cross-linguistic route for grammaticalisation is one in which independent verbs and copulas reduce to become affixes.

This chapter has also outlined three mechanisms of change. These are the complementary mechanisms of reanalysis and extension, as well as borrowing. Because reanalysis is driven by surface ambiguity, it will be relevant to the discussions of ambiguous structures in Bumthang.

Finally, this chapter reviewed the literature on Bumthang, Khengkha, and Kurtöp. The verbal systems of these Greater Bumthang languages all encode

meanings which relate to personal knowledge and embodied experience. A copula *na* or *nâ* and a suffix *-na* also occurs in all three.

3. The Bumthang Language

The verbal systems of Bumthang, Khengkha, and Kurtöp each encode some combination of tense, aspect, mode, and personal marking or egophoricity. This chapter will now present a broader overview of Bumthang with respect to the data collected in Canberra. The language as represented in this data diverges somewhat from van Driem (1995), especially in terms of the organisation of the verbal paradigm.

3.1 will identify some basic clausal structures as found in the “Scary Dog” text. 3.2 will move into a preliminary discussion of the verbal paradigm, while 3.3 will move into a preliminary discussion of embedded clauses. Finally, 3.4 will conclude the chapter.

3.1. Bumthang in Use

Of the collected data, the textual materials most resemble the language as it is actually used. This section will identify some representative clauses as found in the “Scary Dog” text. A longer extract from this text can be found in Appendix B.

In this text, the narrator remembers visiting a friend’s house and being chased by their dog. The dog is rapidly gaining on the narrator when his friend arrives (in 1):

- (1) a. *Tshening gon ra buzi,*
 tshe=ning gon ra bu-zé
 here=ABL 3SG come do-SEQ
 ‘Then he came and,’
- b. *goni ko phigidizi ...*
 gon=i ko phi-gidi-zé
 3SG=ERG door open-as.soon.as-SEQ
 ‘As soon as he opened the door ...’
- (Scary Dog:14-15)

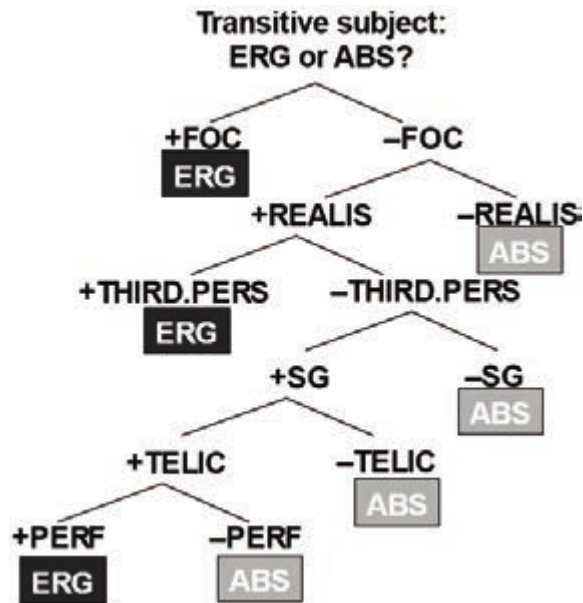
(1.a) is the start of a new utterance in the discourse. This is signified by *tshening*, which can be interpreted to mean ‘from here,’ or ‘then.’ The sentences in (1) differ in valency. (1.a) is a monovalent clause which takes the sole argument (S) *gon*. In contrast, (1.b) is a bivalent clause which takes both a subject or agent (A) *goni* and an object or undergoer (P) *ko*, ‘door.’ The basic word order in this pair of clauses is subject-object-verb (SOV).

(1) also demonstrates case marking in the language. The S of (1.a) is morphologically unmarked, whereas the A of (1.b) takes the ergative suffix =*i*. This pattern in which the A of a transitive clause marked differently to the S and P arguments is characteristic of an ergative-absolutive alignment.

3.1.1. Factors Determining Ergative Marking

Donohue and Donohue (2016) observe that ergative case marking in Bumthang is not solely determined by the valency of the clause, and that other factors which relate to pragmatic focus as well as argument and predicate semantics

Figure 3.1. Factors in Bumthang Ergative Marking
(reproduced from Donohue and Donohue 2016:186)



are also relevant. These factors apply in a hierarchical fashion. This is summarised in the decision tree in Figure 3.1.

In Figure 3.1, *FOC* relates to pragmatic focus as represented in the word order. As well as SOV order, other orders such as OSV and OVS are also found. Donohue and Donohue (2016:182) observe that these alternate orders express different types of pragmatic implication: OSV places an identificational focus on the subject, whereas OVS de-emphasises the subject. In these orders (+FOC), the subject must take the ergative case suffix.

In terms of argument semantics, *THIRD.PERS* and *SG* refer to the person (3rd) and number (singular) of the agent. In terms of predicate semantics, *REALIS*

and *PERF* refer to the modal and aspectual status of the clause (see 3.2), while *TELIC* refers to whether the verb specifies an end-boundary or not. Ergative marking is linked with these factors. Conversely, the presence or absence of the ergative suffix can in turn diagnose pragmatic functions, and the argument and predicate semantics of the clause.

3.1.2. Embedded and Non-Embedded Structures

The sentences in (1) are demonstrative of a type of embedded clause found in the language. Structurally, (1.a) is “chained” to (1.b) through the use of the sequential suffix *-zé*. This means that the former is embedded within the latter, as represented in (1’):

(1’) [matrix [subordinate *tshening gon ra buzi*] *gon ko phidigizi*]

Returning to the “Scary Dog,” the narrator recounts that when his friend arrives and opens the door (in 2):

(2) ... *ngat joajoa gon mae nangó gae.*
 ngat joajoa gon mal nang=ró gal-s⁸
 1SG quickly 3SG house inside=ALL go-PFV.PRS
 ‘... I quickly went inside his house.’
 (Scary Dog:15)

(2) represents the final link in the clause chain. Where in (1) the sequential suffix *-zé* chains two embedded clauses, in (2) the suffix *-s* encodes perfective aspect as well as information about the speaker’s personal involvement in the event. This information filters back through each clause in the chain such that

8 While the suffix *-s* is not pronounced here, its presence can be detected by a high tone that attaches to the verb.

the entire sequence in which the narrator's friend arrives, opens the door, and lets him inside is understood in terms of perfective aspect and personal involvement.

The clauses in (1) are embedded, whereas the clause in (2) is non-embedded. Moreover, the suffix *-zé* is used in embedded clauses, whereas *-s* is used in non-embedded clauses. For this reason, *-s* may be termed a *finite suffix*. However, I will avoid using this term in this thesis in favour of the more general term *main clause suffix*.⁹

3.1.3. Verbal and Non-Verbal Predication

(1) and (2), the primary meaning of the clause is contributed by a verb. In (1.a) this is *ra*, 'go'; in (1.b) this is *phi*, 'open'; and in (2) this is *gal* 'go.' Hence in these cases, the *predicate* meaning of the clause is contributed by the verb (see Payne 1997:174).

However, in other cases the predicate meaning of the clause is not contributed by a verb, but by some other type of constituent. An instance can be found in the "Scary Dog" text when the narrator points out the beast in (3):

9 I will avoid using this term for the reason that what is *finite* and what is *non-finite* in Bumthang has not yet been clearly established.

- (3) *Goné maeró khwi chetpodé na.*
 gon=é mal=ró khwi chetpo=dé na
 3SG=GEN house=ALL dog grand=INDF COP
 ‘At his house there was a grand dog.’
 (Scary Dog:3)

The predicate meaning of (3) is contributed by the noun phrase *khwi chetpodé*, ‘a grand dog.’ Moreover, where (1) and (2) express dynamic events such as ‘coming’ and ‘going,’ (3) expresses a state of affairs.

The copula *na* that occurs in this clause links one noun phrase to another, and will be looked at in Chapter 5.

3.1.4. Summary

Several basic clausal structures can be found in the “Scary Dog” text. These include monovalent and bivalent clauses, embedded and non-embedded clauses, and verbal and non-verbal predicates.

3.2. Verbal Paradigm

Verbs can take two different classes of suffixes. *Subordinate suffixes* like *-zé* embed clauses within other clauses, as in (1). They also express a temporal relationship between the embedded and the matrix clause. Hence, *-zé* links clauses into a linear temporal sequence, whereas another suffix *-mo* links clauses into a coterporal event. Both suffixes can be found in the text extract in Appendix B..

Table 3.1. Verbal Paradigm of Bumthang

Polarity	Mode	Aspect	Personal	Impersonal
Affirmative	Realis	Perfective	-s	-na
		Imperfective	-za	
	Irrealis		-sang	-Ø
Negative	Realis	Perfective	ma- -s	ma- -za
		Imperfective	mé- -za	
	Irrealis		mé- -Ø	

Main clause suffixes encode information which relates to aspect and mode, as well as to an agent's personal involvement in the clause. These forms exist in a paradigmatic relationship to each other. The use of one suffix (usually) precludes the use of any other suffix in a clause. These are summarised in Table 3.1.

This verbal paradigm is organised around three sets of meaning categories. The first set involves polarity and tense, the second set aspect and mode, and the third set personal marking or *egophoricity*.

3.2.1. Polarity and Tense

The first set of categories involves *polarity* and *tense*. Polarity designates the event or state expressed by the clause as either true (affirmative) or as false (negative). In this second respect there is an overlap between the category of polarity and the process of *negation* (Payne 1997:282).

Tense relates the event or state expressed by the clause to another point in time (Payne 1997:236). Reichenbach (1947:71-72) designates three components of tense. These are the *point of speech* at which the clause is uttered, the *point of time* at which something occurred, and the *point of reference* to which it is related. Payne (1997:236) observes that for many languages the point of reference *is* the point of speech.

In the paradigm in Table 3.1, there is a two-way split between affirmative and negative polarities. The affirmative paradigm is not explicitly marked, whereas the negative paradigm is marked through the use of prefixes. These exhibit a two-way split between past and non-past tenses, as in (4):¹⁰

- (4) a. *Awyi kashra makhros.*
 awya=i kashra ma-khrot-s
 wolf=ERG deer NEG.PST-chase-PFV.PRS
 ‘The wolf did not chase the deer.’
- b. *Awyi kashra mékhrot.*
 awya=i kashra mé-khrot-Ø
 wolf=ERG deer NEG.NPST-chase-IRR.IPRS
 ‘The wolf will not chase the deer.’
 (KJZ2-20160901-01)

The event of (4.a) is understood to be completed, and so the past prefix *ma-* is used. In contrast, the event of (4.b) is understood to be unrealised, and so the non-past prefix *mé-* is used.

10 For this section (and much of the thesis) I will switch to elicited sentences in order to compare clausal structures more clearly.

3.2.2. Aspect and Mode

The second set of categories involves *aspect* and *mode*. Where tense relates an event or state to another point of reference, aspect relates only to the internal structure of that event or situation (Payne 1997:234). Sasse (2002:199) observes that the literature on aspect is highly divergent, but also that there are areas of consensus. The most salient is the consensus that aspect is a matter of boundaries, where

[the] basic distinction is that between unbounded and bounded situations: situations may be conceived of as including their starting points or endpoints or both, or may be conceived of as persistent situations with no boundaries implied. (Sasse 2002:202).

This notion of boundedness can be treated as something which is marked through morphology or syntax, or as something which is inherent to the event or state itself.¹¹ In the approach taken by Bickel (1996,1997), both of these notions are treated as relevant. This approach will be outlined and used in 4.1.

Mode (or *mood*) relates to the speaker's attitude towards an event or state (Payne 1997:244). This can be conceptualised in terms of permission, or in terms of certainty. Both are demonstrated by the use of the modal *must* in (5):

- (5) a. *You must leave.* (Deontic)
 b. *They must have left.* (Epistemic)

Payne observes a basic distinction between *realis* and *irrealis* modes. *Realis* mode asserts the speaker's certainty that something occurred, whereas *irrealis*

11 Sasse (2002:203) terms these approaches ASPECT1 and ASPECT2 respectively. ASPECT1 is linked with the traditional notions of *Aktionsart* and *actionality*, while ASPECT2 is linked with the traditional notions of *viewpoint aspect* and *aspect proper*.

mode “makes no claims with respect to the actuality of the event or situation described” (Payne 1997:244).

In both the affirmative and negative paradigms in Table 3.1, there is a two-way split between realis and irrealis modes. Within the realis there is a two-way split between perfective and imperfective aspects. This means that there is a three-way distinction between suffixes and an unmarked verb form, as in (6):

- (6)
- a. *Awyi kashra khros.*
awya=i kashra khrot-s
wolf=ERG deer chase-PFV.PRS
‘The wolf chased the deer.’
 - b. *Awyi kashra khroza.*
awya=i kashra khrot-za
wolf=ERG deer chase-IPFV
‘The wolf is chasing the deer.’
 - c. *Awyi kashra khrot.*
awya=i kashra khrot-Ø
wolf=ERG deer chase-IRR.IPRS
‘The wolf will chase the deer.’
- (KJZ2-20160901-01)

In (6.a) the perfective personal suffix -s encodes that the event is bounded or completed. In (6.b) the imperfective -za encodes that the event is unbounded or durative. Finally in (6.c), the unmarked verb (-Ø), which has an irrealis impersonal meaning, encodes that the situation is unrealised.¹²

12 Notably, the agent here is ergative even though the clause is marked as irrealis. This contradicts the predictions of Figure 3.1, and suggests that other factors affect ergativity in Bumthang.

3.2.3. Personal Marking

The final category involves *personal marking*, also known as *egophoricity*.¹³

For the purposes of the thesis, I will use the first term when I refer to Bumthang, and the second term when I refer to the literature.

San Roque, Floyd, and Norcliffe (Forthcoming:1) describe egophoricity in two ways. Broadly, it is “a general phenomenon of linguistically flagging the personal knowledge, experience, or involvement of a conscious self.” Narrowly, it is “the grammaticalized encoding of the personal or privileged knowledge or involvement of a potential speaker (the primary knower) in a represented event or situation.” The category of egophoricity can be defined with reference to several parameters, which will be discussed in 4.2.

With respect to this definition, several parts of the paradigm in Table 3.1 exhibit a two-way split between personal and impersonal marking, as in (7):

13 San Roque, Floyd, and Norcliffe (Forthcoming:6) observe that “egophoric and non-egophoric markers have been given a (perhaps exceptionally) high number of labels in the literature,” and give a representative selection.

- (7) a. *Ngai khwi gwes.*
 nga=i khwi gwe-s
 1SG=ERG dog tie.up-PFV.PRS
 ‘I tied up the dog.’
- b. *Goni khwi gwena.*
 gon=i khwi gwe-na
 3SG=ERG dog tie.up-PFV.IPRS
 ‘He tied up the dog.’
- (KJZ2-20160901-01)

The choice between suffixes in (7) depends on whether the speaker is personally involved in the event or not. In (7.a) the speaker is also the agent of the event, and so uses the personal suffix *-s*. In contrast, the speaker is not involved in the event of (7.b), and so uses the impersonal suffix *-na*. This is demonstrative of a two-way egophoric split.

Notably, this two-way split between personal and impersonal marking is only found in the perfectives and in the affirmative irrealis parts of the paradigm. There is, in contrast, no split in the negative realis, nor in the imperfectives. Two associated suffixes, impersonal *-na* and personal *-sang*, are also absent from the verbal paradigm.

3.2.4. Integration of *-sang*

The irrealis personal suffix *-sang* does not occur in the negative paradigm. Moreover, its usage in certain structures sets it apart from the other verbal suffixes. These alternate structures are well attested in the data. (8) is one instance:

- (8) *Awyi khraksang longa na.*
 awya=i khrak-sang longa na
 wolf=ERG make.noise-IRR.PRS seem COP
 ‘It seems like the wolf will howl.’
 (KJZ2-20160901-01)

The predicate meaning of (8) is contributed by the verb *khrak*, ‘howl,’ with the suffix *-sang*, but this is then followed by the adverb *longa*, ‘seem,’ and the copula *na*. This is demonstrative of a *biclausal* structure as represented in (8’):

- (8') [matrix [subordinate *awyi khraksang*] *longa na*]

Within this structure, *-sang* is then not a main clause suffix but a subordinating suffix. This sets it apart from the other suffixes but also aligns it with a process of *clausal nominalisation*, which allows for entire clauses to be treated as noun phrases (Genetti, et-al. 2008:98). In the case of (8), the nominalised clause *awyi khraksang* is selected as a complement by the main clause *longa na*.

The main clause suffix has developed from a nominalising or subordinating suffix. In this proposed route, the copula gradually becomes optional in structures like (8). This allows for the use of the nominalised clause as non-embedded main clause, which in turn allows for the reanalysis of the nominaliser *-sang* as a main clause suffix. Table 3.2 summarises these changes.

Table 3.2. Reanalysis of Nominaliser to Main Clause Suffix

Stage	Description	Structure
1.	nominalised clause with copula	[[NP... V- <i>sang</i>] _{NP} <i>na</i>] _{IP}
2.	nominalised clause without copula	[[NP... V- <i>sang</i>] _{NP}] _{IP}
3.	reanalysis as main clause	[NP... V- <i>sang</i>] _{IP}

This proposed route is prefigured by Hyslop's (2011:422-455) discussion of clausal nominalisation in Kurtöp. It also has precedents in the wider literature. For instance, Bickel (1999:298) and Genetti, et-al. (2008:101) both observe that in many Tibeto-Burman languages, nominalised clauses can occur as non-embedded clauses, while Delancey (2011) observes a tendency for nominalised structures to be reanalysed as finite structures.

3.2.5. Summary

This section has presented an overview of polarity and tense, aspect and mode, and personal marking in the verbal paradigm. Of the suffixes, *-na* and *-sang* do not occur in the negative paradigm, while the occurrence of *-sang* in embedded clauses shows that it originates in the clausal nominalisation system.

3.3. Auxiliary Verbs

The subordinating suffix *-zé* chains two clauses into a linear sequence, as in (1). Although they are chained together, these clauses remain largely independent, in that each has a predicative meaning contributed by the verb of that clause, and in that each contains its own arguments.

In a variation of this, the suffix *-zé* can also be used in an auxiliary structure in which an embedded verb is immediately followed by a non-semantically rich auxiliary verb, as in (9):

- (9) *Ngat khwi haning shraksi gae.*
 ngat khwi=ha=ning shrak-zé gal-s
 1SG dog=vicinity=ABL run.away-SEQ go-PFV.PRS
 ‘I ran away from the dog.’
 (KJZ1-NOTES-MD2013:47)

In (9), the auxiliary verb *gal*, ‘go,’ “[does] not “embody the major conceptual relation, state, or activity expressed by the clause” (Payne 1997:84), but it instead conveys a sense of motion away from something. Other auxiliaries with similar meanings relating to tense and aspect are found. These are summarised in Table 3.3. With the exception of *zat*, ‘finish,’ all of the listed auxiliaries be found in the text in Appendix B..

Crucially, it is also possible for the copulas *wen* and *na* to be used in this same construction. This will be touched upon in 5.1.2.

Table 3.3. Auxiliary Verbs in Bumthang

Form	Meaning
<i>blek</i>	‘leave (something)’
<i>gal</i>	‘go’
<i>nyit</i>	‘remain’
<i>ra</i>	‘come’
<i>zat</i>	‘finish’

3.4. Concluding Remarks

This chapter has presented an overview of Bumthang as represented in the Canberra data. Several clausal structures can be found in materials such as the “Scary Dog” text. These include monovalent and bivalent clauses, matrix and subordinate clauses, and clauses with verbal and non-verbal predicates.

The verbal paradigm of Bumthang is organised around the categories of polarity and tense, aspect and mode, and personal marking. Of the main clause suffixes, *-na* and *-sang* do not occur in the negative paradigm. The latter suffix originates in the clausal nominalisation system.

Finally, there is also a class of auxiliary verbs which occur in biclausal structures to encode additional tense and aspect information. The copulas *wen* and *na* are also able to occur in these biclausal structures.

II. SYNTACTIC CHANGE IN THE VERBAL SYSTEM

4. The Contemporary Verbal Paradigm

Two suffixes in the contemporary verbal paradigm, *-na* and *-sang*, show signs of originating from outside sources. 3.2.4 briefly looked at the provenance of *-sang*, while this chapter will now turn to *-na*.

The suffix *-na* encodes both perfective and impersonal meaning. Thus, it shares perfective aspect with the perfective personal suffix *-s*, is set apart from it by marking impersonal rather than personal. Notably, *-na* does not occur in the negative paradigm. This has subsequent implications for the status of personal marking in the paradigm.

This chapter will explore how *-na* is used in the verbal paradigm. 4.1 will discuss it in terms of aspect, while 4.2 will discuss it in terms of personal marking. Finally, 4.3 will evaluate its status in the paradigm. 4.4 will conclude the chapter.

4.1. Perfective and Imperfective Aspect

We find a two-way split between realis and irrealis modes in both the affirmative and negative paradigms. Within the realis there is a two-way split between perfective and imperfective aspects.

To reprise the overview in 3.2.2, there is a consensus among researchers that aspect is a matter of boundaries. Boundedness can be treated as something which is marked through morphology or syntax, or as something which is inherent to the event or state expressed by the clause.

In the approach taken by Bickel (1996, 1997), both of these notions are treated as relevant. In this approach,

[marked] ASPECT₁ and [inherent] ASPECT₂ are conceived of as being in a strict correspondence relationship... such that ASPECT₁ operators are phase selectors that “pick out” or “select” matching phases provided by ASPECT₂. (Sasse 2002:223)

This *selectional theory of aspect* operates along two tiers (Bickel 1996:196).¹⁴

On one tier, the temporal structures of events or states can be decomposed into two parts. These are the start and end boundaries, which are represented by the symbol <τ>, and the phases between boundaries, which are represented by the symbol <φ>. At the second level, morphological and syntactic markers will then select for one or the other (or both) of these parts. Perfective markers will select for boundaries, while imperfectives will select for phases (Sasse 2002:223). This affects the understanding of the sentence, as in (1):

- (1) a. *He is dying.*
 b. *He died.*

In (1), the verb *die* can be decomposed into the structure [(φ)τ] in which the moment of death is preceded by an optional duration of dying. Hence in (1.a)

14 The first tier relates to *Aktionsarten theory*, in which “time structure is represented by a temporal tier consisting of regular alternations of phases (φ) and boundaries (τ),” while the second tier relates to *aspect theory*, in which “aspect semantics is defined by operators selecting a phase and/or one or more boundaries.”

the participle form *is dying* selects for the phase ϕ , while in (1.b) the past form selects for the end-boundary τ . These structures are represented in (1'):¹⁵

- (1') a. *die* [φ τ]
- |
- is dying*
- b. *die* [φ τ]
- |
- died*

As such, each morphological or syntactic form selects for one part of the event or state to the exclusion of the alternate part.

Bumthang exhibits a similar alternation between perfective and imperfective meanings, as in (2):

- (2) a. *Gon seza.*
 gon se-za
 3SG die-IPFV
 ‘He is dying.’
 (KJZ1-20151023-06)
- b. *Gon ses.*
 gon se-s
 3SG die-PFV.PRS
 ‘He died.’
 (KJZ1-20151009-08)

Again in (2), the verb *se*, ‘die,’ can be decomposed into the structure $[(\phi)\tau]$. Hence in (2.a) the imperfective suffix *-za* selects for the phase, while in (2.b)

15 These structures are highly simplified in comparison to those found in Bickel (1996).

the perfective suffix *-s* selects for the end-boundary.¹⁶ Again, each morphological marker selects for one part of the event or state to the exclusion of the alternate part.

4.1.1. Interactions across Tiers

The interactions between morphological markers and event structures can significantly affect the reading of the clause, as in (3):

- (3) a. *Gon rap thek bae.*
 gon rap thek bal-s
 3SG.ABS time one cough-PFV.PRS
 ‘He coughed once.’
- b. *Gon baeza.*
 gon bal-za
 3SG.ABS cough-IPFV
 ‘He is coughing.’
 (KJZ2-201610901-01)

In (3), the verb *bal*, ‘cough,’ can be decomposed into the singular structure [τ] (see Bickel 1996:198-200). While in (3.a) the perfective suffix selects for the boundary, in (3.b) the imperfective suffix cannot select for a phase. In other words, the structure of ‘cough’ does not allow for a reading in which one cough is sustained for a long period of time. The only coherent reading of (3.b) is one in which there is a sequence of coughs.

16 The personal rather than impersonal suffix is used here to encode the speaker’s certainty. This represents a flexible usage of the personal suffix, which will be discussed in 4.2.3.3.

(4) demonstrates a second instance of the interaction between morphology and event structure:

- (4) a. *Awyi kashra khroza.*
 awya=i kashra khrot-za
 wolf=ERG deer chase-IPFV
 ‘The wolf chased the deer.’
- b. *Awyi kashra khros.*
 awya=i kashra khrot-s
 wolf=ERG deer chase-PFV.PRS
 ‘The wolf chased the deer.’
 (KJZ2-20160901-01)

In (4), the verb *khrot*, ‘chase,’ can be decomposed into the structure $[\varphi(\tau)]$ (see Sasse 2002:224). Hence in (4.a) the imperfective suffix selects for the phase, while in (4.b) the perfective suffix selects for an arbitrary end-boundary. This can be contrasted with the structure of ‘die’ in (1) and (2), where the end-boundary is an inherent part of the event.

(5) demonstrates a final instance of this interaction across tiers:

- (5) a. *Ngat khiksa.*
 ngat khik-za
 1SG.ABS be.cold-IPFV
 ‘I am cold.’
- b. *Ngat nas.*
 ngat na-s
 1SG.ABS be.sick-PFV.PRS
 ‘I am sick / become sick.’
- (KJZ1-NOTES-MD2013:31-32)

In (5), the verbs *khik* and *na*, ‘be cold’ and ‘be sick,’ can be decomposed into the structure $[\tau\phi]$ (see Bickel 1996:201). In (5.a) the imperfective suffix selects for the phase. In (5.b) the perfective suffixes selects for the *start*-boundary. This means that the clause is understood to be still ongoing at the point of speech.

There is a degree of intuitive sense to the $[\tau\phi]$ structure of stative verbs. Timberlake (2007:284) observes that while dynamic events such as ‘dying,’ ‘coughing,’ and ‘chasing’ require some transference of energy to take place, states such as ‘being cold and sick’ continue through inertia. New states are largely instantiated through some other event. Hence, the structures of events such as (5) can be characterised the presence of a start-boundary but with no implicit end-boundary.

4.1.2. Perfective *-na*

The suffix *-na* occurs at a comparable frequency to *-s* in the Canberra data. It also selects for the boundaries of event and state structures, as in (6):

- (6)
- a. *Gon baena.*
gon bal-na
3SG.ABS cough-PFV.IPRS
'He coughed.'
- b. *Awyi kashra khrona.*
awya=i kashra khrot-na
wolf=ERG deer chase-PFV.IPRS
'The wolf chased the deer.'
(KJZ2-20160901-01)
- c. *Gon wuduna.*
gon wuduk-na
3SG.ABS be.tired-PFV.IPRS
'He is tired / has become tired.'
(KJZ1-20151023-06)

In (6.a) and (6.b), *-na* selects for the end-boundaries of each event. Hence in (6.a) the event 'cough' is understood to be singular and punctual, while in (6.b) the event 'chase' is understood to have an arbitrary end-point. This demonstrates the use of *-na* as a perfective suffix. In (6.c) *-na* also selects for the start-boundary of the state. Here however, it is often ambiguous as to whether this structure should be analysed as a verb which takes the suffix *-na*, or as an adjective which is followed by the copula *na*. This is because for this structure, both express similar meanings. This issue will be explored in 5.2.3.

4.1.3. Summary

Morphological aspect markers select for different parts of events and states. Of the verbal suffixes in Bumthang, the perfectives *-s* and *-na* select for start and end-boundaries, whereas the imperfective *-za* selects for phases. There is ambiguity between the suffix *-na* and the copula *-na* in relation to stative verbal and adjectival structures.

4.2. Personal Marking

A two-way split between personal and impersonal markers is found in several parts of the paradigm. To reprise 3.2.3, this category is also known as *egophoricity*, and can be narrowly defined as “the grammaticalized encoding of the personal or privileged knowledge or involvement of a speaker (the primary knower) in a represented event or situation” (San Roque, Floyd, and Norcliffe Forthcoming:1).

Egophoricity varies across languages such that markers in some languages may align with the “default” characteristics of egophoricity, while in other languages they may depart from this default. For this reason, San Roque, Floyd, and Norcliffe (Forthcoming:7-8) choose to define egophoricity in terms of several parameters, which relate to the morphosyntax of markers, their core meanings, *person sensitivity*, and their *shiftability*. These parameters and characteristics are summarised in Table 4.1.

Table 4.1. Core Characteristics of Egophoric Marking
(reproduced from San Roque, Floyd, and Norcliffe Forthcoming:8)

Parameter		Core Characteristics
Meaning		personal knowledge, embodied experience, privileged access; interacts with volition
Morphosyntactic Expression		grammaticalised; bound form; obligatory category
Person Sensitivity	1) Target Argument	sensitive to the identity of subject / actor arguments
	2) Default Distribution	associated with the speaker in declaratives, addressee in interrogatives
	3) Flexibility	predictable, restricted distribution
Shiftability		shifts perspective between: speaker in statements, addressee in questions, reported speaker / addressee in reported speech

4.2.1. Morphosyntactic Expression

Egophoricity in a narrow sense is marked by grammaticalised forms, including copulas, auxiliaries, and affixes. In this respect, San Roque, Floyd, and Norcliffe (Forthcoming:9) compare two Tibeto-Burman languages, Tibetan and Galo. The first language Tibetan makes a two-way split in the copulas, as in (7):

Tibetan:

- (7) a. *Nga bod=pa yin.*
 I Tibetan(person) be.CJ
 ‘I am a Tibetan.’
- b. *Kho bod=pa red.*
 he Tibetan(person) be.DJ
 ‘He is a Tibetan.’

(Delancey 1992:42)

In (7.a), *CJ* stands for the *conjunct*, which marks a primary knower’s embodied experience, while *DJ* in (7.b) stands for the *disjunct*, which marks non-embodied experience. This can be compared with the second language Galo, which makes a two-way split in the morphology in (8):

Galo:

- (8) a. *ŋó ʔacín dót bá.*
 ŋó ʔacín dó-tó-bá
 1SG cooked.rice eat-EGO-PFV:DIR
 ‘I’ve just had my meal.’
- b. *Bii ʔacín dógée bá*
 bii ʔacín dó-gée-bá
 3SG cooked.rice eat-ALTER-PFV:DIR
 ‘He has had his meal.’

(Post 2013:113-114)

In (8.a) *EGO* stands for the *egophoric* suffix *-tó*, while *ALTER* in (8.b) stands for the *alterphoric* suffix *-gée*. While Tibetan in (7) marks egohoricity through the copular system, Galo in (8) marks it through verbal suffixes. San Roque, Floyd, and Norcliffe (Forthcoming:9) also note that some languages may use more than one method.

The suffixes *-s* and *-na*, and *-sang* and the unmarked verb (*-Ø*), exemplify a two way split between personal (or egophoric, or conjunct) and impersonal (or alterphoric, or disjunct) marking in Bumthang. There is also a two-way split between firsthand and non-firsthand copular forms, such as that between *naksa* and *na*. While the verbal suffixes mark egophoricity, whereas the copular forms mark a form of evidentiality. The two categories will be compared in 5.3.2.

4.2.2. Core Meaning

The core meanings of egophoricity relate to the notions of personal knowledge, embodied (that is, personally felt) experience, and privileged access to events and states (San Roque, Floyd, and Norcliffe Forthcoming:8). First, the speaker will use an egophoric marker when they have been personally involved in or have personally experienced an event. Otherwise, they will use a non-egophoric marker.

In Bumthang the involvement and experience of the speaker motivates the alternating use of the suffixes *-s* and *-na*, as in (9):

- (9) a. *Ngai khurwa zus.*
nga=i khurwa zu-s
1SG=ERG buckwheat.pancake eat-PFV.PRS
‘I ate the khurwa.’
- b. *Goni khurwa zuna.*
gon=i khurwa zu-na
3SG=ERG buckwheat.pancake eat-PFV.IPRS
‘She ate the khurwa.’
- (KJZ1-NOTES-MD-2013:76,78)

The speaker in (9.a) is also the one involved in the event, and so uses the personal suffix *-s*. In (9.b) the speaker is not involved in the event and has not experienced the event, and so uses the impersonal suffix *-na*.

Second, the speaker will use an egophoric marker when they have privileged access to an event or state. (10) shows this for Bumthang:

- (10) a. *Ngat gas.*
ngat ga-s
1SG.ABS be.happy-PFV.PRS
‘I am happy / have become happy.’
- b. *Gon gana.*
gon ga-na
3SG.ABS be.happy-PFV.IPRS
‘She is happy / has become happy.’
- (KJZ1-NOTES-MD2013:30)

In (10), the verb *ga*, ‘be happy,’ relates to a subjective state. In (10.a) the speaker has access to their own subjective state, and so uses the personal suffix. In contrast, the speaker in (10.b) does not have access to someone else’s sub-

jective state except through surface appearance. They then use the impersonal suffix. These sentences demonstrate that personal marking in Bumthang expresses the same core meanings as egophoricity.

4.2.3. Person Sensitivity

Egophoric markers relate to the personal knowledge, embodied experience, and privileged access of a *primary knower* (San Roque, Floyd, and Norcliffe Forthcoming:7). This is the person who is understood to have epistemic authority in respect to an event or state. In (9) and (10) it is the speaker who takes on the role of the primary knower. However, in (11) it is the addressee who takes on this role:

- (11) *Wii zhra zuspigé?*
 wi=i zhra zu-s-pa=é=gé
 2SG=ERG what eat-PFV.PRS-NMLZ=GEN=Q
 ‘What did you eat?’
 (KJZ1-NOTES-MD2013:36)

The addressee of (11) is the one who is assumed to have epistemic authority, and so the personal suffix is still used. This can be compared with (12), where there is no such assumption:

- (12) *Goni zhra thungnagé?*
 gon=i zhra thung-na=gé
 3SG=ERG what see-PFV.IPRS=Q
 ‘What did she see?’
 (KJZ1-NOTES-MD2013:72)

In (12), the impersonal suffix is used instead. (11) and (12) then demonstrate that the personal markers are sensitive to the identity and assumed knowledge of the primary knower. In other words, they are *person sensitive*.

San Roque, Floyd, and Norcliffe (Forthcoming:15) identify three components of person sensitivity. These are the identity of the subject or agent (S or A) of the clause, the existence of a “default” pattern of usage, and the degree to which egophoric markers can be used outside this default pattern.

4.2.3.1. S, A, and P Argument Sensitivity

Egophoric markers may be sensitive to the identity of the subject or agent (S or A) of the clause, or to the identity of the undergoer (P) (San Roque, Floyd, and Norcliffe Forthcoming:16-18). In the first case, the egophoric marker will be used in declarative clauses with first person S and A arguments, as well as in interrogative clauses with second person S and A arguments, while the non-egophoric marker will be used everywhere else. As a shorthand, I will refer to these contexts for egophoric marking as *first person subject declaratives* and *second person subject interrogatives* respectively.

In the second case, the egophoric marker will be sensitive to the P of the clause. However, it is noted that no languages exhibit *only* this second type of person sensitivity are known. This suggests that there is an implicational hierarchy in which languages with undergoer-sensitive marking will also necessarily have S or A marking.

For languages with flexible markers (see 4.2.3.3), the identity of the S, A, or P argument may be less relevant. In these languages,

egophoric marking is licensed by a general notion of involvement and personal experience rather than reliably triggered by a particular set of roles. (San Roque, Floyd, and Norcliffe Forthcoming:17)

In this respect, the authors cite data from the East Bodish language Dzala to demonstrate that while the egophoric or *epistemic authority* (EA) suffix *-u* is sensitive to the identity of the subject or agent, it can be extended to “other situations in which the speaker/addressee is involved in the event, including as an undergoer” (San Roque, Floyd, and Norcliffe Forthcoming:17). This can be seen in (13):

- Dzala:
- (13) *Border* *eskul=kha* *mà* *tshu-te*
 boarding school=LOC down enroll-IRR
 khor-u.
 brought-PST.EA
 ‘So he brought me down to enroll at boarding school.’
 (Genetti, et-al. 2009:17)

Similarly in Bumthang, while the personal suffixes are sensitive to the identity of the S or A, they can also be used in situations where the speaker or addressee is the implicit undergoer, as in (14:)

- (14) *Khwi shrorzé ras.*
 khwi=i shror-zé ra-s
 dog=ERG release-SEQ come-PFV.PRS
 ‘The dog escaped and chased (me).’
 (Scary Dog:10)

For (14), the involvement of the speaker as an undergoer has been previously established in the discourse. Hence in (14), while the speaker is not the S nor the A, the personal suffix is still used. This demonstrates an affinity between Bumthang and Dzala.

4.2.3.2. **Default Distribution**

Egophoricity exhibits a “default” pattern in which the egophoric marker will be used with first person declaratives and second person interrogatives, while the non-egophoric marker will be used everywhere else (San Roque, Floyd, and Norcliffe Forthcoming:20-21). This default distribution is represented in Table 4.2.

Languages can depart from this default in several ways. For instance, the egophoric marker may be used with first person declaratives, but not with second person interrogatives, or vice-versa (see Bickel 2008). Elsewhere, two different *types* of egophoric markers may occur with each type of clause. In the

Table 4.2. Default Distribution of Egophoric and Non-Egophoric Markers
(reproduced from San Roque, Floyd, and Norcliffe Forthcoming:3)

Subject Identity	Declarative	Interrogative
First Person	EGO (speaker)	NON-EGO
Second Person	NON-EGO	EGO (addressee)
Third Person	NON-EGO	NON-EGO

case of Bumthang, the personal and impersonal suffixes also exhibit the default distribution. However, both the personal and impersonal suffixes are also able to occur outside of this default in order to express an extended range of meanings.

4.2.3.3. Flexibility and Extended Meanings

The notion of *flexibility* is tied to the notion of the default distribution. Across languages, egophoric markers can be more flexibly used outside of the default in order to express extended meanings, or they can be inflexibly constrained to this default (San Roque, Floyd, and Norcliffe Forthcoming:23-24). In this respect, the authors again cite data from Dzala. They demonstrate that egophoric marking in this language is highly flexible in that it “is licensed in many different situations and can participate in a wide range of semantic and pragmatic effects” (San Roque, Floyd, and Norcliffe Forthcoming:23).

Similarly (again) for Bumthang, the personal and impersonal suffixes are also highly flexible. Both are able to occur outside of the default distribution in order to express meanings which relate to the speaker’s certainty or uncertainty.

The personal suffixes can occur outside of first person declaratives to encode either the speaker’s experience of or certainty about the event or state, as in (15):

- (15) a. *Gon igu dizi nyis.*
 gon igu di-zé nyit-s
 3SG.ABS letter write-SEQ stay-PFV.PRS
 ‘He was writing letters (I saw).’
- b. *Gon igu dizirang nyis.*
 gon igu di-zé=rang nyit-s
 3SG.ABS letter write-SEQ=EMPH stay-PFV.PRS
 ‘He was usually writing letters.’
 (KJZ1-20150918-07; Dahl 1985:198-199[13,20])

The sentences in (15) were elicited using the tense, mood, and aspect questionnaire in Dahl (1985:198-206). Both have third person A arguments, and so might be expected to have verbs marked with the impersonal suffix *-na*.

However, in (15.a) the speaker is present to see their brother write letters after dinner, while in (15.b) the speaker recalls that their brother usually wrote letters after breakfast. Hence in both sentences the verb is marked with the personal *-s*. These sentences demonstrate that the personal suffixes can encode the speaker’s experience, or the speaker’s certainty regarding an event.¹⁷

Conversely, the impersonal suffixes can occur with first person declaratives to encode the speaker’s *lack* of epistemic authority, as in (16):

17 In some languages the use of an egophoric marker in a second person declarative may give the impression of rudeness in that it “[asserts] one’s personal knowledge of, and, by extension, one’s authority over an addressee’s actions” (San Roque, Floyd, and Norcliffe Forthcoming:28-29). This topic has not yet been adequately explored in Bumthang.

- (16) *Ngat phrum zuna.*
 ngat phrum zu-na
 1SG.ABS cheese eat-PFV.IPRS
 ‘I think I ate cheese.’
 (KJZ1-NOTES-MD2013:35)

For (16), the speaker’s knowledge is in doubt. It may be the case that they don’t remember eating anything, or it may be the case that they are not sure if it was cheese or some other food that they ate.¹⁸ In either case, the impersonal suffix marks this lack of certainty.

(15) and (16) demonstrate that the personal and impersonal suffixes are both highly flexible. While they occur in the default distribution to express meanings which relate to personal knowledge, embodied experience, and privileged access (or a lack thereof), both can also occur outside of the default distribution to encode speaker certainty or uncertainty.

4.2.4. Shiftability

Egophoric markers are *shiftable* in that they can represent perspectives other than that of the speaker (San Roque, Floyd, and Norcliffe Forthcoming:29).

The most basic type of shiftability is that of the default distribution, in which an egophoric marker is used with both first person declaratives and second per-

18 The use of a non-egophoric marker in first person declaratives and interrogatives may also give the impression of irony, humbleness, and annoyance (San Roque, Floyd, and Norcliffe Forthcoming:28-29). The equivalent construction in Bumthang is used to indicate uncertainty, as seen in (16). The use of personal and impersonal markers in Bumthang for rhetoric effect remains underexplored.

son interrogatives. This represents a shift between the speaker and the addressee.

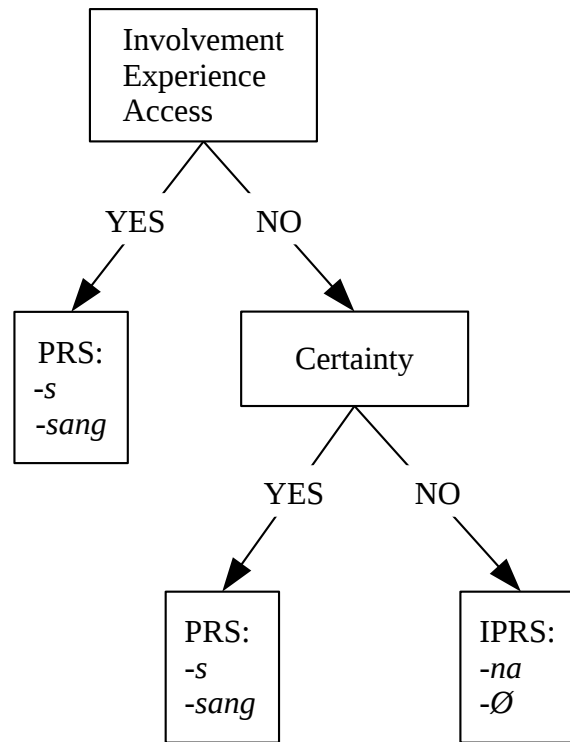
It is noted that a second type of shiftability is found in reported speech, wherein egophoric markers represent the perspective of a reported speaker. In Bumthang, a tangential instance of this second type is found in clauses where a personal suffix occurs with the hearsay evidential *re*. (17) is one such instance:

- (17) *Gon rasang re.*
 gon ra-sang re
 3SG.ABS come-IRR.PRS HEAR
 ‘He is going to come (I am told).’
 (KJZ1-20151016-06)

The irrealis personal suffix *-sang* in (17) represents the knowledge or certainty of a third party more than it does that of the speaker. This shows that the personal suffixes in Bumthang can be used even when the primary knower of the utterance is someone other than the speaker.

The notion of shiftability can differentiate the category of egophoricity from evidentiality in Bumthang. This is because egophoric markers have the capacity to represent multiple perspectives, whereas evidential marking is largely tied to the perspective of the speaker. The two will be compared in 5.3.

Figure 4.1. Personal Marking in Bumthang



4.2.5. Summary

This section has discussed egophoricity in relation to personal marking in Bumthang. Personal suffixes can occur in first person declaratives and second person interrogatives to express meanings related to personal knowledge, embodied experience, and privileged access to events. Moreover, both the personal and impersonal suffixes can occur elsewhere to encode speaker certainty and uncertainty, as summarised in Figure 4.1.

Table 4.3. Verbal Paradigm of Khengkha

Polarity	Mode	Aspect	Personal	Impersonal
Affirmative	Realis	Perfective	<i>-pa</i>	<i>-na</i>
		Imperfective	<i>-ta</i>	<i>-lo</i>
	Irrealis		<i>-témé</i>	<i>-Ø</i>
Negative	Realis	Perfective	<i>ma- -pa</i>	<i>ma- -na</i>
		Imperfective	<i>mé- -ta</i>	<i>mé- -lo</i>
	Irrealis		<i>mé—Ø</i>	

4.3. Integration and Reconstruction

The suffix *-na* encodes both perfective and impersonal meaning, which makes it a key part of the contemporary verbal paradigm. However, *-na* and *-sang* do not to occur in the negative paradigm. This sets the two apart from the other suffixes and demonstrates that neither they nor the category of personal marking are fully integrated.

4.3.1. Comparison with Khengkha

This discussion of Khengkha is based partly on data in Yangrom and Arkesteijn (1996), and partly on the data collected at the Australian National University in 2016. Both were reviewed in 2.3.3. The verbal paradigm of Khengkha is summarised in Table 4.3.

This paradigm is also organised around the categories of polarity and tense, aspect and mode, and personal marking. However, with the exception of *-na* this paradigm is populated by an entirely different set of forms. These include the

perfective *-pa*, which may be related to the Proto-Tibeto-Burman **-pa* (Benedict 1972:96), and the imperfective *-ta*, which is also found in Kurtöp (Hyslop 2012:47).

The category of personal marking is also more pervasive in the Khengkha paradigm than in that of Bumthang. This is for the reason that a two-way split is also encoded in the imperfective. Moreover, the forms which are used remain consistent across both the affirmative and negative paradigms. As such both the category of personal marking, as well as the suffixes which express it, have been more extensively integrated into the contemporary Khengkha paradigm.

The fact that Bumthang and Khengkha use mostly different forms to mark the same distinctions suggests that their paradigms have developed in parallel. On the other hand, the presence of *-na* in both languages suggests that it may be linked to the integration of personal marking. This will be explored in Chapters 5 and 6.

4.3.2. Earlier Stage Paradigm

The category of personal marking, as well as impersonal *-na* and personal *-sang* represent a later development in Bumthang. As a corollary to this, it is possible to reconstruct an earlier stage paradigm which consisted of only two suffixes and the unmarked verb. This is represented in Table 4.4.

Table 4.4. Earlier Stage Verbal Paradigm of Bumthang

Polarity	Mood	Aspect	
Affirmative	Realis	Perfective	-s
		Imperfective	-za
	Irrealis		-Ø
Negative	Realis	Perfective	ma- -s
		Imperfective	mé- -za
	Irrealis		mé- -Ø

4.4. Concluding Remarks

This chapter has explored the status of *-na* in the verbal paradigm. This suffix encodes a perfective and impersonal meaning which both groups it with and sets it apart from the perfective personal *-s*. There are also areas of ambiguity between *-na* and the copula *na*.

The suffixes *-s* and *-na* express complementary meanings in relation to personal marking or egophoricity. The ability for the personal and impersonal markers to represent shifting perspectives sets this category apart from that of evidentiality.

Personal marking is less pervasive in Bumthang than it is in Khengkha. Like impersonal *-na* and personal *-sang*, it is not fully integrated. There is a potential link between the integration of *-na* into the paradigm and the integration of personal marking as a whole.

5. The Copular System

There is evidence to suggest that the integration of the suffix *-na* into the verbal paradigm is linked with the integration of personal marking. To explore this link, this chapter will now turn to the copular and evidential systems.

There are two copulas *wen* and *na* which differ from full verbs in several ways. The copulas are unable to take the negative prefixes, a characteristic of all (and only) verbs, and neither can they inflect with the aspect, mode, and personal marking suffixes. The copulas *can* take the suffix *-za*, but here this form encodes firsthand evidentiality rather than imperfectivity.

These copulas can occur in clauses where the predicate meaning is contributed by a non-verbal constituent. They can also occur as auxiliaries following embedded clauses. Both structures suggest routes through which the copula *na* potentially developed into the verbal suffix *-na*.

There are similarities between the category of evidentiality in the copular system and personal marking in the verbal paradigm. Moreover, the projected link between the non-firsthand copula *na* and the impersonal suffix *-na* suggest that personal marking may have developed out of evidentiality in Bumthang.

This chapter will explore the copular. 5.1 will compare *wen* and *na* to full verbs in a cross-linguistic perspective. 5.2 will discuss their use in clauses with non-

verbal predicates. 5.3 will discuss the category of evidentiality in relation to personal marking. Finally, 5.4 will conclude the chapter.

5.1. Copulas in Cross-Linguistic Perspective

Payne (1997:111) observes that all languages employ clauses which express equative, locative, existential, possessive, and attributive meanings. These clauses tend to be similar in that their main or *predicate* meaning is not always contributed by a verb, but by some other type of constituent. The English sentences in (1) show a contrast of verbal and non-verbal clauses:

- (1) a. *She [runs]_{VP}.*
 b. *She [is [my sister]_{NP}]_{VP}.*
 c. *She [is [very intelligent]_{AP}]_{VP}.*
 d. *She [is [in Canberra]_{PP}]_{VP}.*

The predicate meaning of (1.a) is contributed by a full verb *runs*. This is in contrast to (1.b), where the main predicate meaning is contributed by the noun phrase *my sister*, (1.c), where it is contributed by the adjective phrase *very intelligent*, and (1.d), where it is contributed by the prepositional phrase *in Canberra*. In these last three clauses, the verbal element *be* does not in itself contribute the main predicate meaning (Payne 1997:114-117). Instead, it “couples” the subject and the non-verbal predicate. For this reason it can be classed as a *copular verb* or *copula*.

For Bumthang too there are clauses in which the predicate meaning is not contributed by a verb, but by some other type of constituent. (2) presents two sentences which are analogous to those in (1):

- (2) a. *Gon ngaé ashi wen.*
 gon nga=é ashi wen
 3SG.ABS 1SG=GEN older.sister COP
 ‘She is my older sister.’
 (altered; see KJZ1-NOTES-MD2013:5,12)
- b. *Gon tshae thromró na.*
 gon tshal throm=ró na
 3SG.ABS PROX city=ALL COP
 ‘She is in this city.’
 (altered; see KJZ1-20150814-04)

The predicate meaning of (2.a) is contributed by the noun phrase *ngaé ashi*, ‘my sister,’ while the predicate meaning of (2.b) is contributed by the locative noun phrase *tshae thromró na*, ‘in this city.’ In both clauses, the copular verbs *wen* and *na* “couple” the subject and the non-verbal predicate.

Across languages, copulas tend to be set apart from full verbs in several ways (Payne 1997:117-119). First, their paradigms tend to exhibit irregularities and defects. Second, they may also be used as auxiliary verbs in other structures. On the other hand, copular verbs to be derived from stative full verbs.

5.1.1. Irregularities and Defects

In contrast to full verbs, the paradigms of copulas tend to exhibit irregularities and defects. First, they often contain suppletive (phonologically unrelated)

forms. Second, they also often lack the properties that characterise full verbs in a given language. Both tendencies can be found in the English *be*. In the first case, this copula has suppletive form, as in (3):

- | | | | |
|-----|----|-----------------|---|
| (3) | a. | 1SG subject | <i>I am here.</i> |
| | b. | 3SG subject | <i>She is here.</i> |
| | c. | Everything else | <i>We / you / they are here.</i> |

(3) contains three suppletive forms *am*, *is*, and *are*, which agree with the number and person of the subject. In the second case however, this agreement is being lost in existential clauses, as in (4):

- | | | | |
|-----|----|-------------|-------------------------------|
| (4) | a. | 3SG subject | <i>There's one cat here.</i> |
| | b. | 3PL subject | <i>There's two cats here.</i> |

(4) contains one reduced form 's, which is used for both singular and plural subjects. This demonstrates that *be* is becoming defective (Payne 1997:124) in this context.

Irregularities and defects can also be found for *wen* and *na*. Neither copula is able to take the negative prefixes, but instead have the suppletive negative forms *min* and *mut* respectively. Both are also unable to take aspect, mode, and personal marking suffixes. This demonstrates that the copular paradigm is much more reduced than the verbal paradigm, as summarised in Table 5.1.

Table 5.1. Copular Paradigm of Bumthang

Type	Polarity	Non-Firsthand	Firsthand
Equative	Affirmative	<i>wen</i>	<i>wenza</i>
	Negative	<i>min</i>	<i>minza</i>
Existential	Affirmative	<i>na</i>	<i>naksa</i>
	Negative	<i>mut</i>	<i>mutsa</i>

5.1.2. Copulas and Auxiliary Verbs

In contrast to full verbs, copulas can also be used as auxiliary verbs in other types of structures. For these structures, the copulas do not couple the subject and the predicate, but rather encode tense and aspect meaning (Payne 1997:84).

Likewise in Bumthang, *wen* and *na* can occur as auxiliaries following embedded clauses of the type discussed in 3.3. Of the two, *wen* occurs only rarely and has an unclear usage, whereas *na* occurs commonly. (5) compares the use of the copula with the use of the auxiliary:

- (5) a. *Ngat saró nyitsi na.*
 ngat sa=ró nyit-zé na
 1SG.ABS earth=ALL stay-SEQ COP
 ‘I am sitting here.’
- b. *Gon saró nyitsi nyis.*
 gon sa=ró nyit-zé nyit-s
 3SG.ABS earth-ALL stay-SEQ stay-PFV.PRS
 ‘He was sitting here.’
 (KJZ1-20151016-03)

In (5.a), *na* encodes a present tense meaning, whereas the auxiliary *nyit*, ‘stay,’ in (5.b) encodes a past tense meaning. The latter auxiliary verb can take a sub-

set of verbal prefixes and suffixes, whereas the copula cannot. This demonstrates that the copular paradigm is reduced even in comparison to the auxiliaries.

The ability for the copula *na* to occur in this structure suggests one potential route for its development into the suffix *-na*. However, the interposition of the subordinating suffix *-zé* in this structure also prevents the kind of immediate adjacency that would enable the suffix to develop out of the copula. This potential route is evaluated in 6.2.2.

5.1.3. Copulas and Stative Verbs

Finally, copulas tend to belong to the same semantic class as stative or posture verbs like *stand* and *sit*, and may themselves derive from stative or posture verbs (Payne 1997:117; see also Newman 2002). The literature on neighboring and antecedent languages suggests that this may be the case for *wen* and *na* too.

Matisoff (2003:610) reconstructs the Proto-Tibeto-Burman copula, nominaliser, and subordinator **way*. Hyslop (2011:464) tentatively suggests that the Kurtöp copula *wen* may have its origin in this proto-form. The proto-form is not a stative nor stance verb, but its similarity to contemporary *wen* in Bumthang raises two alternate possibilities. First, it may be the case that Kurtöp *wen* and Bumthang *wen* are cognates which have descended from

*way. Second, it may be the case that one or both languages borrowed the form and use of *wen* through a contact language.

Benedict (1972:99) reconstructs the Proto-Tibeto-Burman verb **na*, ‘dwell, rest,’ while Matisoff (2003:603) reconstructs the verb **g-na-s*, ‘be, live, stay, rest, alight, perch.’ Again, Hyslop (2011:464) suggests that the Kurtöp copula *na* may have its origin in this proto-form. Again, it may be the case that Kurtöp *nâ* and Bumthang *na* are cognates, or it may be the case that one or both languages borrowed the form and use of *na*.

Notably, Hyslop also states that the form **g-na-s* is “still a lexical verb in Kurtöp’s closest neighbor Bumthap, suggesting it has grammaticalized as a copula only recently in Kurtöp” (Hyslop 2011:464). This characterisation may well be true for the other dialects of Bumthang. It does not appear to be the case for the Ura dialect as represented in the Canberra data, where *na* has been shown to differ in several ways from full verbs, and does not have a stance meaning.

5.1.4. Summary

The characteristics of *wen* and *na* align with those of copulas more broadly. The two exhibit irregularities and defects, and both can be used as auxiliary verbs. The ability for *na* to occur following embedded verbal structures suggests one route for its development into the suffix. Finally, *wen* and *na* may derive from a class of stative or posture verbs

5.2. Non-Verbal Predicates

Predicate meaning can be contributed by constituents such as noun, adjective, and prepositional phrases. This was seen in the English sentences in (1), where the copula *be* links the subject to a predicate complement in order to express equative (in 1.b), attributive (in 1.c), and locative (in 1.d) meanings. This was also seen in the Bumthang sentences in (2), where *wen* and *na* link the subject to a predicate complement in order to express equative (in 2.a) and locative (in 2.b) meanings.

Predicate meaning in Bumthang can be contributed by noun and adjective phrases, while location is marked morphologically through the use of noun phrase suffixes. Each copula occurs with different types of constituents and morphological markers.

5.2.1. Equation and Proper Inclusion

The copula *wen* can only occur in clauses where the predicate meaning is contributed by a noun phrase. Payne (1997:114) observes that clauses of this type express meanings related to *equation* and *proper inclusion*. Equative clauses are those in which the subject and predicate refer to the same thing, while proper inclusive clauses are those in which the subject is among a class of things designated by the predicate. For most languages there is no structural difference between the two. This can be seen in (6):

- (6) a. *Tshae semchan ngaé zhumbala wen.*
 tshal semchan nga=é zhumbala
 PROX animal 1SG=GEN cat
 wen
 COP
 ‘This animal is my cat.’
 (altered; see KJZ1-NOTES-MD2013:11-12)
- b. *Tshae semchan zhumbala wen.*
 tshal semchan zhumbala wen
 PROX animal cat COP
 ‘This animal is a cat.’
 (KJZ2-20160428-03)

The difference between the equative meaning of (6.a) and the proper inclusive meaning of (6.b) relates to the structure of the predicate. In (6.a), the possessive pronoun *ngaé*, ‘my,’ specifies that the predicate refers to a unique beast. In (6.b), the predicate refers to a generic class of beasts. As such (6.a) has an equative meaning, while (6.b) has a proper inclusive meaning. Nonetheless, the predicate meanings of both are contributed by noun phrases.

Table 5.2. *Locative, Existential, and Possessive Clause Structures*
(findings from Clark 1978 [cited from Payne 1997:123])

Locative	NOM before LOC	(33 of 40 languages)
Existential	LOC before NOM	(27 of 40 languages)
Possessive	LOC before NOM	(35 of 40 languages)

5.2.2. Location, Existence, and Possession

The copula *na* can occur in a broader range of clauses. First, it can occur in clauses where the predicate meaning is contributed by a locative noun phrase, as in (7):

- (7) *Gon tshae thromró na.*
 gon tshal throm=ró na
 3SG.ABS PROX city=ALL COP
 ‘She is in this city.’
 (altered; see KJZ1-20150807-03)

The difference between (7) and (6) relates to the locative marking of the predicate. The allative suffix *=ró* attaches to the ends of noun phrases to encode a locative meaning.¹⁹ This is analogous to the English use of prepositions in (1.d).

Payne (1997:122) observes that many languages express the meanings of *existence* and *possession* using a locative structure. This is corroborated by Clark

¹⁹ Notably, both the allative *=ró* and the locative *=na* can be used to encode a stative meaning (while only *=ró* can encode dynamic motion). Used in this sense, the allative tends to have the meaning of being ‘in’ the location, whereas the locative has a more general meaning of being ‘at’ or ‘around’ the location.

(1978 [cited from Payne 1997:122]), a study which finds that locative, existential, and possessive clauses tend to have the following structures. These are summarised in Table 5.2. In this table, *NOM* refers to the nominal constituent, while *LOC* refers to the locative constituent.

Existential and possessive clauses in Bumthang align with the structures in Table 5.2. Instances of both are in (8):

- (8) a. *Tshena zhumbala zon na.*
 tshe=na zhumbala zon na
 here=LOC cat two COP
 ‘Here are two cats.’
 (KJZ2-20160428-03)
- b. *Ngadó ashidé na.*
 nga=ró ashi=dé na
 1SG=ALL older.sister=INDF COP
 ‘I have an older sister.’
 (KJZ1-20150904-05)

(8.a) has an existential meaning which introduces new participants into the discourse (Payne 1997:123). It may be the case that the word order of (8) has been inverted in order to place an identificational focus on the subject.²⁰ Meanwhile, (8.b) has a possessive meaning which locates someone or something (here *ashidé*, ‘an older sister’) to the subject (here the first person pronoun *ngadó*).

20 To refer back to the discussion of Donohue and Donohue (2016:182) in 3.1.1, OVS order has been shown to place an identificational focus on the subject. In light of this, Payne (1997:127-128) also notes that the difference between locative, existential, and possessive constructions "probably really lies in the notion of topicality."

5.2.3. Attribution

The copula *na* can also occur in clauses where the predicate meaning is contributed by an adjective phrase, as in (9):

- (9) *Tshae zhumbala kakan na.*
 tshal zhumbala kakan na
 PROX cat good COP
 ‘This cat is good.’
 (KJZ2-20160428-03)

Payne (1997:111-112) observes that clauses with adjectival predicates tend to express an *attributive* meaning, in which the subject has the property designated by the predicate. This is the case for (9), where the predicate *kakan*, ‘good,’ denotes a property, and is an adjective rather than a noun.

5.2.1 and 5.2.2 have demonstrated that nouns and noun phrases can occur as the arguments of predicates. In contrast, adjectives cannot occur on their own as arguments, but must be marked in some way, as in (10):

- (10) *Utui zhumbala cinkula wen.*
 utui zhumbala cinku-la wen
 DIST cat small-INDV COP
 ‘That cat is small.’
 (KJZ2-20160428-03)

Although (10) resembles an attributive clause such as (9), the use of the copula *wen* brings this into doubt. The predicate in (10) is also marked by *-la* which, following an analysis in Hyslop (2011:316,331), may be termed an *individuating* suffix which allows for the adjectival form to “fulfill the sentential role of

an N.” This means that (10) is understood as an equative rather than attributive clause, with the reading of ‘that cat is the small one.’²¹

The relationship between adjectives and verbs is also sometimes obscure. In the first case, this is because many adjectives historically derive from verbs. The forms of the verb and adjective in (11) are one instance of this phenomenon:

- (11) a. *Goni khwe tshaza.*
 gon=i khwe tsha-za
 3SG=ERG water heat-IPFV
 ‘He is heating the water.’
- b. *Tshae khwe tshanma naksa.*
 tshal khwe tshanma nak-za
 PROX water hot COP-FRST
 ‘This water is hot.’
 (KJZ2-20160421-02)

In (11.a) the verb *tsha*, ‘heat,’ takes the imperfective suffix, whereas in (11.b) the adjective *tshanma*, ‘hot,’ does not. The verb in (11.a) selects both an A and an P, whereas the latter is itself a predicate complement selected by the copula. The ossified morphological marking present on this form suggests that it historically derives from the verb.

There is a historical relationship between the verb of (11.a) and the adjective of (11.b), although there is no longer a productive derivational relationship be-

21 It is not clear if the use of *-la* entails the *lexical derivation* of a noun from an adjective.

tween them. In other cases however, the distinction between verbs and adjectives is less clear, as in (12):

- (12) a. *Goni banggala kamna.*
 gon=i banggala kam-na
 3SG=ERG chilli dry-PFV.IPRS
 ‘He dried the chillies.’
- b. *Banggala kam na.*
 banggala kam na
 chilli dry COP
 ‘The chillies are dry.’
 (KJZ2-20160616-01)

The link between (12.a) and (12.b) is more opaque. In (12.a) the bivalent verb *kam*, ‘dry,’ takes the perfective impersonal suffix, and selects both an A and a P argument. In the case of (12.b) however, it is unclear whether *kam* is a monovalent verb or an adjective.

The ambiguity between these two analyses is in part due to the convergent behaviour of the copula *na* and the suffix *-na* with respect to stative verbs. 4.1.2 demonstrated that in stative structures *-na* does select an end-boundary. This present section shows that the copula does not select for parts of event structure, but itself encodes an unbounded meaning. As such, there is an ambiguity between the suffix and the copula for structures such as (12). These suggest one route by which the suffix may have developed from the copula, which will be returned to in 6.2.1.

Table 5.3. Non-Verbal Predicates in Bumthang

Structure			Type
[[NP]	[NP]	<i>wen</i>]	equation, proper inclusion
[[NP]	[NP _{LOC}]	<i>na</i>]	location
[[NP _{LOC}]	[NP]	<i>na</i>]	existence, possession
[[NP]	[AP]	<i>na</i>]	attribution

This ambiguity recurs across clauses in the language, and suggests one route by which the suffix may have developed out of the copula.

5.2.4. Summary

The copulas *wen* and *na* are used in clauses with non-verbal predicates. *Wen* can only occur in clauses where the predicate is a noun phrase, whereas *na* can occur with both locative noun phrase and adjective phrase predicates. This is summarised in Table 5.3. Ambiguities in the latter adjectival structures suggest another route for the reanalysis of the copula *na* into the suffix *-na*.

5.3. Evidentiality

Evidentiality refers to the grammatical marking of information source (Aikhenvald 2004:3). This relates first to whether the speaker has acquired the information being expressed through direct or indirect means, and second to the manner in which they acquired that information.

Across languages, evidential systems vary in the number of distinctions they make, as well as the types of distinctions that they make (Aikhenvald 2004:23-

26). At one end of the spectrum, languages that make a two-way split may encode firsthand versus non-firsthand experience of an event, hearsay versus non-hearsay evidence, and sensory evidence versus non-sensory evidence, among others. At the other end, languages that make a three, four, or five-way split may encode some combination of specific sensory, hearsay, and inferential evidence (see Aikhenvald 2004:42,51,60-63). In Bumthang, evidentiality is marked in the copular system.

5.3.1. Firsthand versus Non-Firsthand Evidentiality

The copular paradigm in Table 5.1 demonstrates a two-way split between the unmarked forms and those which take the suffix *-za*. While in the main verbal paradigm in Table 3.1, *-za* encodes imperfective aspect, in the copular system it encodes firsthand evidentiality. This is suggested by the alternation in (13):

- (13) a. ? *Tshae zhumbala kakparang na.*
 tshal zhumbala kakpa=rang na
 PROX cat big=EMPH COP
 ‘This cat is really big.’
- b. *Tshae zhumbala kakparang naksa.*
 tshal zhumbala kakpa=rang nak-za
 PROX cat big=EMPH COP-FRST
 ‘This cat is really big.’ (I can see it)
 (KJZ2-20160428-03; NOTES-MD20170912)

The speaker in (13) is referring to an animal in their immediate context. Both clauses only differ in terms of the morphological marking of the copula. While the unmarked *na* in (13.a) is not ungrammatical, it is infelicitous. This is in

contrast to (13.b), where the marked form *naksa* is acceptable. Both clauses can be compared with (14):

- (14) *Tshae ngorma thungkhan kacan na.*
 tshal ngorma thung-khan kacan na
 PROX purr do-NMLZ good COP
 ‘This purring one is good.’
 (KJZ2-20160428-03)

Again, the speaker in (14) is referring to an animal in their immediate context. However, in this case the unmarked form *na* is acceptable. The difference between the infelicity of (13.a) and the acceptability of (14) relates to the semantics of the predicate. In (13a) the predicate *kakparang*, ‘very big,’ refers to a property which is directly perceivable, whereas in (14) the predicate *kacan*, ‘good,’ refers to an intangible property. This indicates that the copular system encodes a two-way split between firsthand (for things directly perceivable through the five senses) and non-firsthand experience, which leaves the evidential basis unspecified. Aikhenvald (2004:26) observes that this distinction is widespread across languages.²²

5.3.2. Evidentiality and Personal Marking

Evidentiality and personal marking or egophoricity are similar categories in that both relate to the personal experience and knowledge of a primary knower. In light of this, San Roque, Floyd, and Norcliffe (Forthcoming:44-47) note that one approach to egophoricity has been to treat it as a sub-type of evidentiality.

²² Typologically, the firsthand versus non-firsthand system identified here aligns with the “A1—firsthand versus everything else” in Aikhenvald (2004:25).

This is because many core characteristics of egophoricity (summarised in Table 4.1) such as person sensitivity and shiftability can also be found in evidential systems. Hence,

the trio of contexts in which egophoric marking typically appears (declaratives with first person subjects; questions with second person subjects and co-referential subjects in embedded speech reports) follows as a consequence of the perspective shifting nature of evidentials more generally” (San Roque, Floyd, Norcliffe Forthcoming:47).

However, in specific languages egophoric markers may differ from evidential markers in several ways. For instance, egophoric markers in a language may not indicate information source (see Thurgood 1986:219). Alternately, evidential markers in a language may not be person sensitive or shiftable (see McLendon 2003). This shows that the relationship between evidentiality and egophoricity must be assessed on a case-by-case basis (San Roque, Floyd, Norcliffe Forthcoming:47).

There are two key differences in Bumthang between evidentiality in the copular system and personal marking in the verbal paradigm. First, personal marking is person-sensitive and shiftable, whereas evidentiality is tied to the perspective of the speaker. Second, personal marking has additional connotations of speaker certainty, whereas evidentiality does not.

4.2.3 has discussed how the personal and impersonal suffixes can relate to the perspectives of different primary knowers. In contrast, the split between first-

hand and non-firsthand marking is tied to the perspective of the speaker, as in (15):

- (15) a. *Gon utui maeró na.*
 gon utui mal=ró na
 3SG DIST house=ALL COP
 ‘He is in that house.’ (I know, but cannot see him)
 (KJZ1-20150807-05)
- b. *Gon kamré bitu naksa.*
 gon kamra=é bit=ró nak-za
 3SG room=GEN outside=ALL COP-FRST
 ‘He is outside the room.’ (I know because I am inside it)
 (KJZ1-20150814-05)

The unmarked copula *na* in (15.a) does not connote speaker uncertainty, but simply leaves the evidential basis unspecified. In contrast, the firsthand copula in (15.b.) marks a situation for which the speaker, being inside the room, has direct evidence. Nonetheless, they are not personally involved in that situation (of someone else’s being outside) as such. It is not embodied involvement of the speaker, but objective visual evidence that is relevant to evidentiality in Bumthang.

Second, where the personal system has extended connotations of speaker certainty (discussed in 4.2.3.3), this is not a necessary component of the evidential system, as shown in (16):

- (16) a. *Tshae mae jikpala naksa.*
 tshal mal jikpa-la nak-za
 PROX house big-INDV COP-FRST
 ‘This house is big.’ (I know because I see it)
- b. *Ngaé mae jikpala na.*
 nga=é mal jikpa-la na
 1SG=GEN house big-INDV COP-FRST
 ‘My house is big.’ (I know, but cannot see it)
- (KJZ1-20150918-07)

Both sentences in (16) involve the speaker but differ in their evidential marking. In (16.a) the firsthand copula marks visual evidence, whereas in (16.b) the unmarked copula makes no such specification. This does not also mean that the speaker is uncertain as to the size of their house. It only means that the speaker is not qualifying their statement with firsthand evidence. In this respect, Aikhenvald (2004:6-7) notes that while modal and evidential meanings can overlap,

cross-linguistically, evidentiality, modality (relating to the degree of certainty ‘with which something is said’ [Aikhenvald’s citation omitted]), and mood (relating to a speech act) are fully distinct categories.

Evidentiality in Bumthang is not tied to speaker certainty. Moreover, the unmarked copula does not necessarily encode an *absence* of firsthand evidence, but is neutral to the question of evidence. That said, it can still encode a non-firsthand meaning through pragmatic implication.

While the personal system extends on the evidential system in terms of its shiftability and connotations of speaker certainty, there are still obvious affini-

ties between the two systems. Furthermore, the unmarked copula *na* is a potential antecedent of the impersonal suffix *-na*. This suggests a route in which the development of the copula into the suffix also results in the transference and subsequent extension of evidential meaning.

5.3.3. Summary

In this section we have looked at evidentiality in the copular system. There is a two-way split between firsthand and non-firsthand (or unmarked) copulas which is based on the direct sensory experience of the speaker. In comparison to personal marking, evidentiality does not represent any perspective other than that of the speaker. There are nonetheless similarities between the evidential and personal systems, in that both relate to a speaker or potential speaker's direct experience of an event or state.

5.4. Concluding Remarks

This chapter has investigated the copulas *wen* and *na*. These copulas differ from full verbs in that they cannot take verbal morphology, and in that they can also be used as auxiliary verbs. *Wen* can only occur in equative and proper inclusive clauses, whereas *na* can occur in locative, existential, possessive, and attributive clauses.

The characteristics and distribution of *na* suggest two routes by which it can have developed into the verbal suffix *-na*. The first route is via auxiliary verb structures, while the second route is via adjectival and stative verb structures.

The copulas are able to take the firsthand evidential suffix *-za*. The categories of evidentiality and personal marking are not identical, but they do share some functional similarities. Moreover, there is functional overlap between the unmarked copula *na* and the impersonal suffix *-na*.

6. Syntactic Change in the Verbal System

There are two potential routes by which the perfective impersonal suffix *-na* developed from the non-firsthand copula *na*: first, via an ambiguity between stative verbal and adjectival structures, and second, via auxiliary verb structures. Additionally, the functional overlap between the suffix and the copula suggest a route for the development of the personal system from the evidential system. This chapter will now turn to the mechanisms which drove these developments.

6.1 will discuss the relevance of reanalysis to the Bumthang data. 6.2 will outline two routes for reanalysis, while 6.3 will outline the accompanying changes in meaning. Finally, 6.4 will conclude the chapter, as well as the thesis.

6.1. More on Reanalysis

In both routes, the development of the suffix from the copula is driven by ambiguity between two analyses of a syntactic pattern. This assumes that while an alteration of the underlying structure has taken place, the surface manifestation remains unchanged. For this reason, the mechanism of reanalysis is relevant to the Bumthang data.

To reprise 2.2.1, reanalysis is a mechanism of syntactic change that affects the underlying structure of a syntactic pattern (Harris and Campbell 1995:61-63).

The underlying structure is understood to contain information about con-

stituency and hierarchy, category labels, grammatical relations, and cohesion, while the surface manifestation consists of morphological marking and word order.

6.1.1. Ambiguity

Timberlake (1977:148-151) observes that

it is difficult to discuss the causation of reanalysis in precise terms, but in attempting to do so, it is useful to distinguish between weak (necessary) and strong (sufficient) causes.

A *necessary* precondition for reanalysis is surface ambiguity, as seen in the sentence *visiting relatives can be dangerous* (Harris and Campbell 1995:70). However, while ambiguity is a necessary precondition, it is difficult to gauge what constitutes sufficient ambiguity for reanalysis (Timberlake 1977:150)

Harris and Campbell (1995:71) define a notion of structural ambiguity which necessitates that each reading of an ambiguous structure must be a structure that is otherwise available in the language. For instance, each reading of the sentence *visiting relatives can be dangerous* is a structure found elsewhere in the language, as in *growling dogs* and *travelling alone*. Notably, it is not necessary for a second reading of a syntactic pattern to exist before reanalysis (Harris and Campbell 1995:71-72). The *potential* for multiple analyses of a sentence is sufficient.

6.1.2. Actualisation

Reanalysis does not immediately alter the surface manifestation of a syntactic pattern. Instead, it is followed by a process of *actualisation* in which the consequences of reanalysis are mapped out (Timberlake 1977:141). Actualisation often involves extension, and often further reanalysis.

Structural ambiguity is a necessary precondition for reanalysis. Reanalysis in turn precedes actualisation. In light of this, Harris and Campbell (1995:81-82) outline a three-stage process for reanalysis and actualisation:

Stage A, Input: The input structure has all of the superficial characteristics of the input analysis.

Stage B, Actualization: The structure is subject to multiple analysis; it gradually acquires the characteristics of an innovative analysis, distinct from that of Stage A,

Stage C, Completion: The innovative structure has all of the superficial characteristics of the innovative analysis.

Reanalysis involves the transition from Stage A to Stage B when there are two alternate analyses of a syntactic pattern. The progression of these stages possibly implies that the innovative structure will replace the input structure. However, it is noted that the input analysis can coexist with the innovative analysis for some time. This is relevant in the case of Bumthang, where the copula continues to persist alongside the innovative suffix in the language.

6.2. Two Possible Routes for Reanalysis

The first route for the development of the suffix from the copula involves structural ambiguity between stative verbs and adjectives (Route One), whereas the second route involves structural ambiguity between a monoclausal and a biclausal auxiliary structure (Route Two). In both cases, there is no ambiguity before the reanalysis takes place. Hence in both the necessary precondition is the potential for ambiguity.

6.2.1. Stative Verbs and Adjectives (Route One)

This discussion will begin by reviewing the convergent aspects of the verbal paradigm and copular system. 4.1 has shown that *-na* shares perfective aspect with the perfective personal suffix *-s*, but differs by encoding an impersonal meaning. In regard to event structures, the perfectives select for start and end-boundaries. This means that for the stative event structure $[\tau\phi]$ the perfectives can only select for the start-boundary such that the clause will retain a stative or ongoing reading. An example is reproduced in (1):

- (1) a. *Ngat wudu.*
 ngat wuduk-s
 1SG.ABS be.tired-PFV.PRS
 ‘I am tired / became tired.’
- b. *Gon wuduna.*
 gon wuduk-na
 3SG.ABS be.tired-PFV.PRS
 ‘He is tired / became tired.’
 (KJZ1-20151023-06)

Meanwhile, 5.2.3 has shown that the copula *na* occurs with adjectival predicates. For the most part adjectives have a clear historical derivational relationship to verbs. However, in select cases, the analysis of a form as verbal or adjectival is ambiguous. In turn the analysis of *na* as the copula or as the suffix is also ambiguous. An example is reproduced in (2):

- (2) a. *Banggala kam na.*
 banggala kam na
 chilli dry COP
 ‘The chillies are dry.’
- b. *Banggala kamna.*
 banggala kam-na
 chilli dry-PFV.IPRS
 ‘The chillies are dry / have dried.’
 (KJZ2-20160616)

There is ambiguity in (2) between the analysis of an adjectival predicate in (2.a) and the analysis of a verbal predicate in (2.b).²³ However, the syntactic pattern in (2.b) did not exist before reanalysis. Rather, potential ambiguity was driven by other structures in the language.

First, the structure in (2.a) has an unambiguous analogue in (3):

- (3) *Tshae khwe tshanma naksa.*
 tshal khwe tshanma nak-za
 PROX water hot COP-FRST
 ‘This water is hot.’ (I can feel it)
 (KJZ2-20160421-02)

The predicate *tshanma*, ‘hot,’ in (3) historically derives from the verb *tsha*, ‘heat.’ While the copula does not itself select for parts of event structure, it is used to encode a stative or existential meaning. This adjectival structure is the basis for the reanalysis of the copula as the suffix.

²³ It should be noted that the copula and the suffix have identifiably different tones, such that in contemporary Bumthang (2) is not truly ambiguous. However, I posit that this prosodic difference represents a later development following the innovation of the suffix. In support of this, it can be noted that *-na*, unlike the other suffixes, still maintains a separate tonal contour. This suggests that *-na* is not fully integrated into the phonological verbal domain, either.

Table 6.1. *Reanalysis via Stative Structures (Route One)*

Stage	Description	Structure
1.	a. stative adjectival predicate	[NP AP <i>na</i>] _{IP}
	b. stative verbal predicate	[NP V- <i>s</i>] _{IP}
2.	reanalysis of copula into suffix	[NP V- <i>na</i>] _{IP}

Second, the structure in (2.b) has an analogue in (4):

- (4) *Ngat nas*
 ngat nat-s
 1SG.ABS be.sick-PFV.PRS
 ‘I am sick / I became sick.’
 (KJZ1-NOTES-MD2013:31-32)

The predicate in (4) is explicitly marked by the perfective personal -s, and yet expresses a stative or inchoative meaning. This demonstrates that the use of perfectives with some event structures creates a stative reading similar to that in (3). Hence, the structure in (4) enables the reanalysis of the copula as a suffix. The proposed route is summarised in Table 6.1.

Route One observes that before reanalysis, there were two stative structures available in Bumthang, in Stages 1.a and 1.b. Each of these structures can converge in form and meaning. This enables the reanalysis of the suffix *-na* from the copula *na* to create the innovative structure in Stage 2. Finally, actualisation leads to the extension of *-na* into other contexts. For instance, it is now found in bivalent clauses which have a clear A argument, such as (5):

- (5) *Goni banggala kamna*
 gon=i banggala kam-na
 3SG=ERG chilli dry-PFV.IPRS
 ‘He dried the chillies.’
 (KJZ2-20160616)

(5) demonstrates that *-na* is now used outside of stative and monovalent clauses to express a perfective meaning. In this way the innovative structure is “gradually [acquiring] the characteristics of an innovative analysis” (Harris and Campbell 1995:81-82).

s

The innovative analysis in Route One necessitates the decategorialisation of the copula as well as an increase in its cohesion with the verb. Notably, the predicate itself has not been altered: because both stative verb and adjective structures are pre-existing, reanalysis only entails an increase in the range of *na* into the verbal domain.

6.2.2. Auxiliary Structures (Route Two)

5.1.2 has shown that the copula *na* can also be used as an auxiliary verb following an embedded clause. In this structure it encodes a present tense meaning which filters back through the clause chain, as reproduced in (6):

- (6) *Ngat saró nyitsi na.*
 ngat sa=ró nyit-zé na
 1SG.ABS earth=ALL stay-SEQ COP
 ‘I am sitting here.’
 (KJZ1-20151016-03)

The close proximity of the copula to the lexical verb in (6) suggests another potential route for reanalysis. However, the interposition of the subordinating suffix *-zé* is a barrier to the immediate adjacency of the two.

Given the structure of (6) it might be predicted that the suffix *-zé* rather than the copula *na* should be more susceptible to reanalysis because it is already directly adjacent to the verb. Furthermore, this would mirror the pathway by which *-sang* developed into a main clause suffix (outlined in 3.2.4), and it would mirror Bickel’s (1999:272) observation that

in many if not most Sino-Tibetan languages relative clause and attributive/genitive markers are identical with nominalization devices and that sentences bearing such markers can also function as independent utterances.

Hence in structures like (6), the development of the subordinating or nominalising suffix into a main clause suffix is well-attested.²⁴ Conversely, the proposed reanalysis of the copula in this structure is less well-attested.

The reanalysis of *-sang* in 3.2.4 is accompanied by the gradual omission of the copula following the nominalised clause, whereas the proposed reanalysis of the copula *na* is accompanied by the gradual omission of the subordinating suf-

²⁴ Textual evidence suggests that *-zé* has in fact been reanalysed as a main clause suffix.

fix. This allows for direct adjacency between the copula and the verb. In this respect, Hyslop states that in Kurtöp the subordinating suffix *-si* can be optionally omitted when the embedded verb is used with an auxiliary or copula. In these cases, “it is the *possible* presence of the converbal [subordinating] morphology that characterizes the construction” (2011:652-655). (7) is an instance of this structure:

- Kurtöp:
- (7) *Chutshot yanga winimthena jong geshang*
 chutshot yanga winim-the=na
 time five COP.EQ.DBT-DEF=LOC
 jong ge-shang
 emerge go-PFV.EGO
 (Hyslop 2011:669)

In (7) the verb *jong*, ‘emerge,’ is immediately followed by the auxiliary verb *ge*, ‘go.’ The suffix *-si* is omitted, but the embedded structure can be inferred from the adjacency of the embedded verb and the auxiliary (Hyslop 2011:669).

Instances of an unmarked auxiliary structure are also found in Bumthang, although not for the copula *na*, as in (8):

Table 6.2. *Reanalysis via Auxiliary Structures (Route Two)*

Stage	Description	Structure
1.	a. embedded clause with subordinator	[[NP... V-zé] na]
	b. embedded clause without subord.	[[NP... V] na]
	c. main clause with suffix	[NP... V-I]
2.	reanalysis of copula into suffix	[NP... V-na]

- (8) a. *Caga them nyit buzi,*
 caga them nyit bu-zé
 some wait stay do-SEQ
 ‘I stayed there for some time,’
 (Scary Dog:19)
- b. *Tshén pomzareng cung wen.*
 tshén pomzareng cung wen
 then decoration hang COP
 ‘Then, the decoration is hung.’
 (Yak Decorating:15)

In (8.a) the verb *them*, ‘wait,’ is immediately followed by the auxiliary verb *nyit*, ‘remain,’ with no intervening material. Other data also shows the auxiliaries *blek*, *gal*, and *ra* being used in this unmarked structure. In (8.b) the verb *cung*, ‘hang,’ is immediately followed by the copula. This suggests that it may also be possible for the copula *na* to be used in the unmarked auxiliary structure. The proposed route for reanalysis is summarised in Table 6.2.

A structure analogous to those in (8) is the basis for reanalysis. In the input analysis, an embedded verb is followed by the copula *na* in the main clause, with no intervening material in Stage 1.b. In this structure the copula encodes

present tense. However, due to the existence of a superficially identical structure in which a main clause verb takes an inflectional suffix in Stage 1.c, there is a second potential analysis. This enables the reanalysis of the copula into a main clause verbal suffix in Stage 2. Similar to Route One, Route Two also necessitates the decategorialisation of the copula as well as an increase in its cohesion with the verb. Notably, the biclausal structure in Stages 1.a and 1.b continues to exist following the innovative analysis.

6.2.3. Summary

There are two potential routes for the reanalysis of the copula *na* into the suffix *-na*. Route One is driven by an ambiguity between stative verb and adjectival structures, whereas Route Two is driven by ambiguity between biclausal and monoclausal structures. For each route the same alterations take place in the underlying structure, namely decategorialisation and tighter cohesion with the verb. Similarly for both, the input structure persists even after the innovative analysis.

6.3. Meaning Change

Harris and Campbell (1995:50-91) observe that in many instances the reanalysis of a syntactic structure also involves a transfer or alteration in meaning, and that “it is commonplace for changes of tense, aspect, or mood to accompany reanalysis.” The reanalysis of the copula into the suffix entails two types of meaning transference and alteration. These are aspect and personal marking.

6.3.1. Aspectual Change

In both routes, reanalysis likely leads to an initial transfer of aspectual meaning which is followed by subsequent developments. In the case of Route One, the meaning of the innovative suffix *-na* aligns neatly with the convergent meanings of both the copula and pre-existing verbal suffixes. The copula *na* does not select for parts of event structure, but itself encodes a stative or existential meaning. Similarly, the perfective suffix *-s* selects for the start-boundary of a stative structure $[\tau\phi]$, as discussed in 4.1.1, rather than an end-boundary. As such, the innovative suffix *-na* can also be subsequently reanalysed as a perfective with no immediate alteration in meaning. Through actualisation, this suffix is extended into non-stative and non-ambiguous structures. An instance of this was previously seen in (5).

Similarly in the case of Route Two, reanalysis likely leads to an initial transfer of meaning. When used in an auxiliary structure, the copula *na* encodes a present tense meaning. This necessitates that the innovative suffix *-na* also initially encoded a present tense meaning with a wider range of verbal predicates. Hence it is unclear how *-na* can then have developed into a perfective rather than imperfective marker through this route. In order to motivate Route Two, it is then necessary to posit subsequent shifts from a durative to a perfective meaning.

6.3.2. Evidentiality into Personal Marking

5.3.2 has suggested that the development of the suffix from the copula also involves the transference and subsequent extension of evidential meaning. As a precedent to this route, San Roque, Floyd, and Norcliffe (Forthcoming:36-39) list several languages in which egophoric markers have developed out of evidential markers. An instance of this is the Mongolic language Manghuer, where the egophoric suffix *-ba* originates from a direct evidential, while the non-egophoric suffix *-je* originates from an indirect evidential.

In comparison to the firsthand copula *naksa*, the unmarked copula *na* in Bumthang does not necessarily assert a lack of evidence. Rather, it is neutral to the evidential basis for an utterance, while a non-firsthand meaning arises more from pragmatic implication. However, the reanalysis of the suffix from the copula necessitates the codification of this non-firsthand meaning, and its subsequent development into an impersonal meaning.

Similarly, the perfective *-s* does not initially encode any evidential meaning. Instead, the integration of non-firsthand *-na* means that a firsthand meaning again arises for *-s* through pragmatic implication. Personal marking in the verbal paradigm represents an extension from the resultant evidential split between firsthand *-s* and non-firsthand *-na*.

6.3.3. Summary

This section has outlined two forms of meaning transference and change that accompany the reanalysis of the suffix from the copula. The first of these involves a shift from the stative or existential meaning of the copula to the perfective meaning of the suffix. The second of these involves the transference and development of a non-firsthand evidential meaning from the copula to the impersonal meaning of the suffix. Personal marking in the contemporary verbal paradigm results from a transference and development from evidentiality in the copula system.

6.4. Conclusion

This thesis has explored syntactic change in Bumthang, with specific reference to the verbal suffix *-na* and the copula *na*. Through a close analysis of the different roles the suffix and the copula play in the language, the thesis has shown that there are two potential routes by which the copula can have been reanalysed as a suffix. These are through ambiguous stative verb and adjectival structures opening the path for reanalysis, or through embedded auxiliary verb structures being reinterpreted as single words.

Subsequently, the thesis has also explored meaning transference and shift in Bumthang. Through a comparison of the personal marking and evidential systems of the language, the thesis has hypothesized that the reanalysis of the copula as a suffix has also led to the transference of evidentiality into the verbal

paradigm. This newly integrated category has then extended to become one of personal marking or egophoricity, matching the typological profile of the socially important Tibetan languages of the region.

This thesis has contributed to the documentation of Bumthang, a Tibeto-Burman language of Bhutan, with a focus on its verbal morphology and semantics. In this respect it has investigated the diachronic pathway by which the contemporary verbal paradigm has developed, and by which one category of meaning has developed from another. As with other languages of the region, the documentation of Bumthang may have implications for our understanding of syntactic change and of categorial change in languages more broadly.

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APPENDICES

Appendix A. Notes on the Phonology

This appendix will present brief notes on the phonology of Bumthang focusing on consonants and vowels. Bumthang also has an extensive system of tone, but this will not be discussed here due to its complexity, and also because tone does not have a bearing in relation to the thesis. These notes are drawn from a draft of the in-development sketch grammar mentioned in 1.3.

These notes will begin with the syllable structure. The syllable is split into onset and rhyme, and the rhyme is split into the nucleus and coda. Onsets may consist of one or two consonants, but coda can only consist of one consonant. The rhyme may consist of one or two vowels. The two maximal syllable structures are represented in (1):

- (1) a. [C₁C₂V₁C₃]
 b. [C₁C₂V₁V₂]

An example of a word with the structure in (1.a) is /kron/, ‘village.’ An example of a word with the structure in (1.b) is /pral/, ‘separate,’ which surfaces as [prae].

Appendix A.1. Consonants

There are two onset positions and one coda position. Each position exhibits a more or less restricted inventory of consonants. In the first place the onset may

Table A1. Distinctive Consonants in Bumthang

	Bilabial	Dental	Alveolar	AlveoP	Velar	Glottal
Voiced	b	d	dz		g	
Unvoiced	p	t	ts		k	
Nasal	m		n		ŋ	
Fricative	Φ		s			
Trill			r			
Lateral			l l°			
Approximant				j	w	h

Table A2. Onset Consonant Clusters in Bumthang

	b	p	m	d	t	dz	ts	n	s	g	k	ŋ
w										gw	kw	
r	bɽ	pɽ	mɽ	ɖ	ɽ				ʂ	gr	kr	ŋɽ
l	bl	pl	ml							gl	kl	

consist of one consonant, as in /tʰɛk/ ‘one.’ 19 distinct consonants can occur in the coda, as summarised in Table A1.

In the second place the onset may consist of of a cluster of two consonants.

Only three consonants /r, l, w/ can occur in the second consonant position.

There are also restrictions on which consonants can co-occur. Finally, consonant clusters tend to undergo phonetic changes. These are both summarised in Table A2.²⁵

²⁵ Of these clusters, the /Cj/ series receives a set of unique symbols in the orthography. These are <j, c, sh> for [ɖʂ, tɕ, ʃ] respectively.

Table A3. Distinctive Vowels in Bumthang

	Front	Back
High	i	u
Mid-High	e	o
Mid-Low	ɛ	ɔ
Low	a	

Finally, the coda position collapses the distinction of voiced and unvoiced consonants seen in Table A1, and omits the approximants. The nine coda consonants are /p, m, t, n, s, r, l, k, ŋ/. Notably, the lateral /l/ can occur as a coda underlyingly, but it will not surface unless it can be reanalysed as an onset. For instance, /gal/, ‘go,’ surfaces as [gae] in the irrealis, but as [ga.lae] in the imperative.

Appendix A.2. Vowels

There are eight distinctive vowels, as demonstrated by the minimal pairs in (2), and as summarised in Table A3.

- (2)
- a. *zi* ‘ceremonial beads’
 - b. *ze* ‘leprosy’
 - c. *zɛ* ‘spice mixture’
 - d. *za* ‘shooting star’
 - e. *zɔ* ‘appearance’
 - f. *zo* ‘crafts’
 - g. *zu* ‘eat’

Appendix B. “Scary Dog” Extract

This appendix will provide an extract from the “Scary Dog” text, transcribed first in Donohue (2013), and retranscribed in 2017 by Naomi Peck. This text contains many of the clausal structures which have been discussed in the thesis.

- | | | |
|------|---|---|
| (1) | <i>Rap thek bumó,</i> | One time, |
| (2) | <i>ngat charo maeró khortó gaemo,</i> | I was going to my friend’s house to visit. |
| (3) | <i>Goné maeró khwi chetpodé na</i> | At his house there was a grand dog. |
| (4) | <i>Tshening goné maeró khwi chak-madé gwezi bleksigé.</i> | Then, at his house the dog used to be tied up. |
| (5) | <i>Tshen doshinang gwezi bleksi,</i> | Tied up in the front yard, |
| (6) | <i>Tshening nen thek ngat gaemo,</i> | Then one day when I went, |
| (7) | <i>ngai ko phizi gaegidi,</i> | as soon as I opened the door, |
| (8) | <i>khwi yerzi ramo.</i> | the dog jumped at me. |
| (9) | <i>Tsimini caksai trazi gaemoni,</i> | Moreover, the chain broke, |
| (10) | <i>khwi shrorzi ras.</i> | the dog escaped and chased me. |
| (11) | <i>Tshening ngat khwi naró shraksi gaezi,</i> | Then I had to run away from the dog, |
| (12) | <i>shragó metartó joajoa gaemo.</i> | I was not able to run away fast enough. |
| (13) | <i>Tikka charo yau gotining thazi nyina.</i> | Luckily my friend was watching from an upper window. |
| (14) | <i>Tshening gon ra buzi,</i> | He came, |
| (15) | <i>goni ko phigidisi ngat joajoa gon mae nangó gae.</i> | as soon as he opened the door I quickly ran inside the house. |

- (1) *Rap thek bu-mo,*
time one do-COT
'One time,'
- (2) *ngat charo mal=ró khor=ró gal-mo.*
1SG.ABS friend house=ALL visit=INF go-COT
'I was going to my friend's house to visit.'
- (3) *Gon=é mal=ró khwi chetpo=dé na.*
3SG=GEN house=ALL dog grand=INDF COP
'At his house there was a grand dog.'
- (4) *Tshe=ning gon=é mal=ró khwi.*
here=ABL 3SG=GEN house=ALL dog
chakma=dé blek-zé-gé.
always=INDF leave-SEQ-IRR
'At his house the dog used to be tied up.'
- (5) *Tshen doshi nang gwe-zé blek-zé.*
then front.yard inside tie.up-SEQ leave-SEQ
'Tied up in the front yard.'
- (6) *Tshe=ning nen thek ngat gal-mo,*
here=ABL day one 1SG.ABS go-COT
'Then one day when I went,'
- (7) *ngat=i ko phi-zé gal-gi=dé,*
1SG=ERG door open-COT go-SEQ=INDF
'as soon as I opened the door,'

- (8) *khwi=i yer-zé ra-mo.*
 dog=ERG jump-SEQ come-COT.
 ‘the dog jumped at me.’
- (9) *Tsimini, caksa=i tra-zé gal-mo-ni,*
 moreover chain=ERG break-COT go-COT-straight.away
 ‘Moreover, the chain broke,’
- (10) *khwi=i shror-zé ra-s.*
 dog=ERG release-SEQ come-PFV.PRS
 ‘the dog escaped and chased me.’
- (11) *Tshe=ning ngat khwi na=ró shrak-zé*
 here=ABL 1SG.ABS dog LOC=ALL run.away-SEQ
gal-zé,
 go-SEQ
 ‘Then I had to run away from the dog,’
- (12) *shrak=ró mé-tart=ró joajoa*
 run.away=INF NEG.NPST-able=ALL quickly
gal-mo.
 go-COT
 ‘I was not able to run away fast enough.’
- (13) *Tikka charo yau goti=ning*
 luckily friend up.there window=ABL
tha-zé nyit-na.
 see-SEQ remain-PFV.IPRS
 ‘Luckily my friend was watching from an upper window.’

- (14) *Tshe=ning gon ra bu-zé,*
 here=ABL 3SG.ABS come do-SEQ
 ‘He came and,’

- (15) *gon=i ko phi-gidi-zé*
 3SG=ERG door open-as.soon.as-SEQ
ngat joajoa gon mal nang=ró
 1SG.ABS quickly 3SG house inside=ALL
gal-s.
 go-PFV.PRS
 ‘as soon as he opened the door I quickly ran inside his house.’